

*The* GEAR  
*of*  
THETA TAU



FOUNDED 1871

THETA TAU

THETA TAU

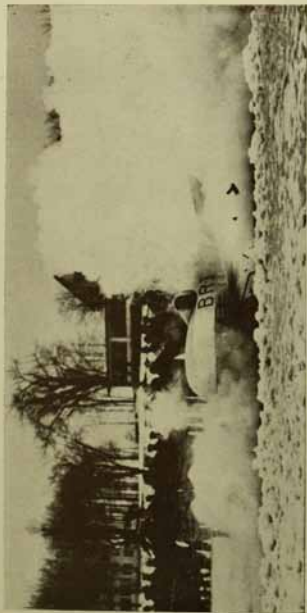


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THETA TAU



SPRING, 1931

VOLUME XX      NUMBER 2



THE START OF BROTHER BULL'S ROCKET SLED TEST

A description of this test will be found on page 14

# The GEAR of THETA TAU

OFFICIAL PUBLICATION OF THE FRATERNITY

F. L. MERRICK, Omicron '21 and J. W. HOWE, Omicron '24

*Editors*

205 ENGINEERING HALL

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VOLUME XX

SPRING, 1931

NUMBER 2

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October 15, 1904

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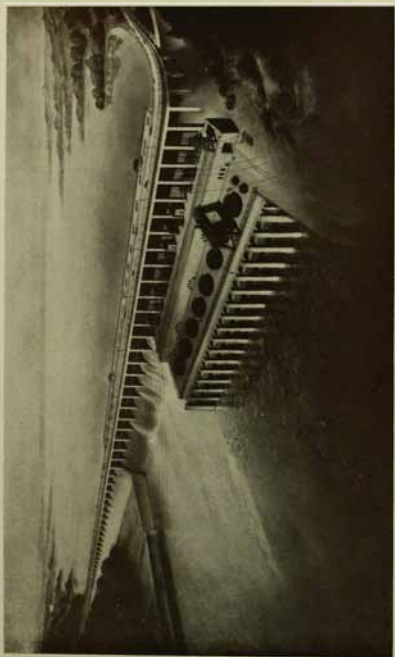
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# Osage Hydro-Electric Project

Largest Hydro Plant In Missouri to Develop  
276,000 H. P., With Head of 90 Ft.  
Using Outdoor Type Units

By E. G. NIELSEN, Omicron '26  
Engineer With Stone and Webster Engineering Corp.

IN a few short months, river flow conditions permitting, there will be created the only large lake in Missouri, and the fourth largest artificial lake in the United States. This Lake of the Ozarks, as it will be known, will serve as a reservoir for the hydro-electric development now being built on the Osage River in central Missouri, for the Union Electric Light and Power Company of St. Louis. It will wind through the hills for 130 miles, inundating an area of 95 square miles, and providing, under 30 foot drawdown, a storage capacity of 1,200,000 acre feet.

The Osage River is one of the secondary streams of this section, rising in Kansas, and flowing through the hills along the northern edge of the Ozark Plateau. It joins the Missouri River at a point eight miles east of Jefferson City, Missouri. Above the dam site, which is four miles above the village of Bagnell, Missouri, it drains an area of 14,000 square miles. As might be expected, river flow is subject to extreme variation; the maximum recorded flow being 110,000 sec-

ond feet, the minimum 324 second feet, and the average 10,500 second feet.

The dam consists of three separate divisions: two abutment sections, a spillway section, and a power house section, all gravity type. Its overall length is 2,543 feet and its maximum elevation above bed rock is 148 feet.

The abutment sections are non-overflow, of conventional gravity type, their only departure from the usual type being the 20-foot highway deck, and three-foot sidewalk carried on piers across the top.

The spillway section is designed to have a capacity of 162,000 second feet, this flow being in addition to any flow through the power station. It consists of 12 sections, each provided with a taintor gate 34 feet long and 20 feet high. The spillway is ogee shape and terminates in a stepped toe designed to eliminate scouring. Six foot piers intervene between sections, these piers supporting the highway, taintor gate trunnions, and an operating deck. The taintor gates, as well as the stop logs which may be placed

upstream from the gates, are manipulated by two seventy-ton gantries on the operating deck.

The power house section may be considered as consisting of two parts: the headworks section, which resists the thrust of the impounded water, and the power house proper, which, while it adds stability to the structure, is not considered as part of the dam proper.

skimmer wall, extending thirty feet below the water surface, diverts all floating debris.

The power house is located on the downstream side of the headworks. As built, the power house accommodates six main units of 33,100 horse power full gate capacity at 90 foot head, and two station service units of 3000 K. V. A. capacity. Substructure and intake facilities have been incorporat-



General View of the Project Taken on January 28, 1911

The headworks portion of the power house section includes the intakes, racks and gates. It is designed as a gravity section, although the upper portion is of reinforced concrete. The intakes are equipped with fixed roller type headgates and vertical trash racks. These, as well as the stop logs which may be placed upstream of the trash racks, are manipulated by the same gantries which operate the tainter gates in the spillway section. A

ed in the construction for the installation in the future of two additional main units.

The main water wheel units are Francis type and are being furnished by Allis-Chalmers Company.

Direct connected to each water wheel is an umbrella type 13,800 volt, 3 phase, 60 cycle generator having a capacity of 23,888 K. V. A. These generators are being furnished by Westinghouse Electric and Manufac-

turing Company. Each unit has an individual motor generator exciter set.

By installing all auxiliary equipment on the main water wheel floor, it was found possible, by raising the next floor only a few feet higher than necessary to protect the station from high tailwater, to locate the generators below the latter floor with only a metal housing projecting above it. Thus, the circular projections above the power house floor in the accompanying picture are not the generators but the housings above them. These covers are high enough to allow the rotor to be lifted clear of the stator without exposure to the weather. By thus omitting the superstructure, a considerable saving was made.

This station will be one unit of four widely separated units serving the Union Electric Light and Power Company. A second is at Keokuk, where the Mississippi is harnessed to 15 generators of 10,000 horse power each. The third is at Cahokia, near St. Louis, one of the large steam plants of the country, and the fourth, Ashley Street Station, is in St. Louis.

Numerous construction features are of interest. All of the 510,000 cubic yards of concrete were mixed in a central mixing plant, equipped with four two-yard mixers. All concrete was mixed two full minutes, the mix being, in general, in the neighborhood of 1:3:5. A completely equipped testing laboratory was maintained at the job in which all mixers were designed and a constant check of concrete poured was made.

A steel construction bridge on the downstream side of the dam, with three standard gage lines as well as

the tracks for the three gantries which straddled the bridge, was used for dam and power house construction. All concrete, except that at the extreme ends of the abutment sections, was poured from this bridge. All possible, of course, was chuted directly to its location. Concrete above the level of the bridge was elevated by concrete hoists attached to the gantries and chuted into place.

Excavation, which totaled 875,000 cubic yards of earth and gravel, was accomplished mainly by walking draglines.

Sand and gravel for concrete material were dredged from the river at a point about three and one-half miles below the dam site, where they were washed and screened, and then shipped, in hopper-bottomed gondolas to the job. This involved the construction of a modern screening and washing plant.

About 14 miles of standard-gage track were built, one line four miles long, connecting the job with the terminus of the Missouri-Pacific at Bagnell.

The first sections built were the spillway and west abutment sections, which lay west of the normal river channel. Because the underlying strata of gravel was water bearing, it was necessary to construct a cofferdam, consisting of a single line of steel sheet piling on both the upstream and downstream sides, extending from the river bank to the west hillside. At the river bank a cellular cofferdam was built, thus enclosing the area to be excavated in a U-shaped cofferdam.

The west abutment and spillway sections were then built in the excavations made possible by the cofferdam.

As the spillways were poured, five notches, each 34 feet wide, were left unpoured above elevation 555.0, which corresponds to low water level. In addition, five sluiceways, with their sills also at elevation 555.0 were left in those portions of the spillway poured in their entirety.

When work on these sections had progressed to the point that the protection of the cofferdam was no long-

both headwater and tailwater, the notches in the spillway will be poured. Flap gates will be used to shut off the flow through the notches. All notches will be poured in progressive stages, so that the level of the reservoir will rise slowly as the level of the notches rises. Flow through the sluiceways will continue during this part of the construction.

The final closure of the dam will be



*Upstream View of Spillway, January 3, 1931*

er needed, a diversion channel was dug which diverted the flow of the river through the notches and sluiceways. A cellular steel sheet piling cofferdam was then thrown across the river channel and the power house section construction was started.

When the power house section has been completed to the point that the headgates and draft tube stop logs may be placed in their respective positions, thus protecting the power house from

made when heavy pre-cast concrete stop logs are lowered in front of the sluiceways. The sluiceways will then be filled with concrete.

An undertaking which was of no mean proportions in itself was the purchase and clearing of the land to be inundated. In accordance with the provisions of the Federal license for the project, it has been necessary to remove all fences, trees, and buildings within the area exposed by a thirty-

foot drawdown, as well as to remove the tops of all trees, etc., which would be exposed by such a drawdown. All material has been burned or disposed of in such a manner that it will not float.

Another very interesting feature of the project is the method used in locating the transmission lines. Two diverging lines transmit the output of the plant; one, a single circuit H-pole line, will connect with the lines from Keokuk at Page Avenue substation on the outskirts of St. Louis; and the other, a double circuit steel tower line to Rivermines, will ultimately connect to the existing system at Crystal City.

Nearly all of the country which these lines traverse is very rough. Roads are, in general, poor and very

scarce. These facts, coupled with the desire to locate the lines as quickly as possible, led to the use of aerial mapping.

From such maps as were available, preliminary reconnaissance was made. Then aerial photographs were taken along the proposed line; these photographs matched by means of land lines and other landmarks and the whole made into maps. Section lines were then put upon the maps, which guided the right-of-way buyers in their operations. By means of the stereoscope, bad hillsides, river crossings, etc., were located and avoided. Finally, line maps were made of the right-of-way area. It has been estimated that a ground survey, in addition to consuming considerably more time, would have cost three times as much.

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#### MINING FELLOWSHIPS OFFERED

The Michigan College of Mining and Technology, at Houghton, Mich., is offering twelve graduate fellowships for the academic year 1931-1932. They carry stipends of \$1,200 annually and will involve research work on the copper and iron resources of northern Michigan. The work covers a full year, from October 1, 1931, with one month for vacation. Further details may be obtained from the college.

The School of Mines, University of Alabama, near Tuscaloosa, Ala., is offering four fellowships in mining and metallurgical research for the nine months beginning September 1, 1931. The salary is \$675. Positions are open to holders of the degree of master of

science, or its equivalent. Details may be obtained from J. R. Cudworth, acting director of the School of Mines, at University, Ala.

The University of Missouri offers four fellowships, the income of which is \$800, for ten months' work open to men qualified to undertake research work intended to solve problems confronting the mining and metallurgical industries of the state. The special topics chosen for 1930-31 are ore-dressing, gravity concentration, flotation ball milling, and magnetic concentration. The students will register in the University as candidates for a degree and comply with the usual University requirements, but most of their work will be advanced study of research problems.

# Engineers Railroading

Where Will a Railroad Career Lead a Graduate Engineer? Special Reference to Railway Signal Engineering

By S. R. HAMILTON

*Alpha, '28; Associate Editor, Railway Signaling, Chicago, Ill.*

WHEN Horace Greeley made his stirring appeal to the young men of America, the call of our railroads to the engineering graduates of the time was an invitation to share in one of the greatest romances in America's history—the growth of a great transportation system. But what of today? What does a railroad career offer, now, to an engineer?

These are moot questions—questions that many an engineer has pondered over at some time or other in his undergraduate days—questions that not a few engineers wish they had pondered over before they acted. As this is being written, thousands of senior engineering students are interviewing representatives of industry and making decisions that determine to a very great extent their future happiness. Perhaps some of these students, reading this, will find something that will enable them to choose—or accept—more wisely.

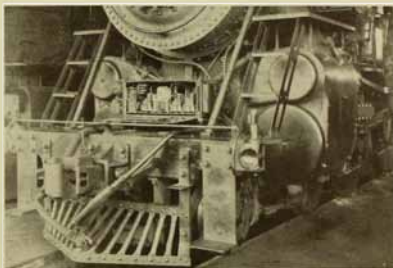
Veteran railroaders will tell you that railroading gets in your blood, that there is something about it that holds you. Notwithstanding the fact that this something is often nothing more nor less than physical or mental inertia,

nevertheless one can not escape the fact that the railroads are today attracting a great many college men.

Practically every type of engineering is represented in a railroad company, and on the larger roads one will find a very definite line drawn between the different engineering departments. Civil engineers probably make up the largest group, with mechanical engineers a close second, while electrical engineers will be found in both the electrical and the signal departments. It is this latter, signal department, around which I shall build most of this discussion.

## SCOPE OF RAILWAY SIGNALING

Briefly, railway signaling is the science of keeping trains moving safely. Not many years ago, railroad officers regarded an automatic block signal as a safety device, yes, but one which might at any time delay trains unnecessarily. Today, thanks to the rapid development of signal and track engineering, signaling devices—and this term embraces a great deal more than automatic block signals—are being applied extensively on railroads in all parts of the world, not only because



*Engine Equipment Box, with Cover Removed, on a Locomotive Equipped for Operation in Continuous Cooled Train-Stop Territory on the Central Railroad of New Jersey*

of the safety they provide, but principally because they are one of the few things that the railroads can rely upon in cutting their operating expenses.

Signal engineering, as practiced on most railroads today, comprises the design, construction, operation and maintenance of block signals of all kinds, automatic train control systems and cab signals, car retarder systems, centralized traffic control systems, interlocking plants and highway crossing signals. The design and construction of these systems is generally handled by a signal officer whose title is superintendent of signals or signal engineer, and who reports to either the chief engineer or the vice-president in charge of operation; while the signal maintenance force reports to the division superintendent.

Many of our signal engineers today

are men who have been educated in the University of Hard Knocks, men who started work on their railroad with a shovel or wrench, back in the days when a pipe-connected signal was an oddity and interlocking plants



*Cab Signal on the Engineer's Side of a Locomotive on the Central Railroad of New Jersey*

were looked upon with suspicion. The signal engineer of tomorrow will be a trained experienced engineer, for signal engineering has developed into a highly specialized branch of electrical engineering.

We think first of block signals, in connection with railway signaling. Automatic block signals protect almost every main railroad line in Amer-

#### AUTOMATIC TRAIN CONTROL AND CAB SIGNALS

Automatic train control systems were installed extensively on the Class 1 railroads in 1922-24, as a result of an order issued by the Interstate Commerce Commission, the intent of the order being to promote the development of such devices. It is doubtful if automatic train control has justi-



Color-Light Automatic Block Signals on the Wabash

ica today, as well as many branch lines. The wayside signals which the passenger sees from the car window are daily rendering a service that is appreciated by only a few. Still fewer realize that, on thousands of miles of road, cab signaling and automatic train control make our railroad journeys immeasurably safer than any other means of transportation available.

fied itself economically, while the psychological effect of partially dispensing with the human element is also of doubtful value. But the knowledge which has been gained through the development of automatic train control systems has opened the door to that more important field—cab signaling.

The reader is probably more or less familiar with the operation of way-





*Freight Train Approaching a Position-Light Siding Signal in Centralized Traffic Control Territory of the Pennsylvania*

side automatic block signals, but very few of us have an opportunity to learn that several railroads are removing these wayside signals and are substituting cab signals, with or without automatic train control, in their place. The cab signal does everything that the wayside signal did—more—and does it better. It is ever present directly in front of the engineman, and, on some installations, in front of the fireman as well. Its aspect can not be lost or forgotten, and its operation is automatic almost to the point of being human.

#### CENTRALIZED TRAFFIC CONTROL

At the present time centralized traffic control is being installed extensively. The idea of operating trains by signal indication alone is not new, but the cost of such systems has, until recently, made their use prohibitive. In a centralized traffic control system, train-orders and time-table rights are dispensed with. All the switches and head-block signals on an entire division may be placed under the control of one man. Complete information as to the location of all

trains is ever present on the control panel of the control machine, and thus one man can align the switches and set the signals for any train movement he desires. Delays and long waits are almost entirely eliminated, running time is reduced, fuel costs are lowered, operators' salaries are elimin-

are being replaced by electric or electro-pneumatic plants, power-operated car retarders are used for freight classification, the cumbersome mechanical locking in electric and electro-pneumatic interlocking machines are being replaced by all-relay locking, and highway crossing signals are finally ap-



Electro-Pneumatic Car Retarders in Pitsen Yard on the Pennsylvania

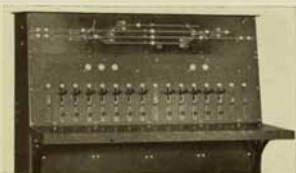
ated, and undue wear and tear on the rolling stock is lessened. The inquisitive engineer will be interested in the fact that only three small wires extending over the entire division are needed for the control and indication of all the switches and head-block signals on that division.

During the last ten years far greater advancement has been made in the development of railway signal systems than during any preceding period in their history. This has been due chiefly to the application of electricity. Mechanical interlocking plants

proaching something like a fair degree of standardization and legibility.

#### START "ON THE LINE"

Probably a railroad career is not so lucrative as many other careers that a graduate engineer can enter. A college graduate, taking a job in a railroad office without having had an experience "on the line", is due for a disappointment. It has been said that many a good engineer's ambition has been stifled by railroad seniority rights, fixed salary rates and straight-jacket conservatism. But there are goals,



A Centralized Traffic Control Machine on the Canadian Pacific at Tron River, Que.

even on the railroads, that are worth striving for.

Experience on the right-of-way or in the shop is of first importance to any college man who thinks he wants to enter railroad work when he graduates. He can get this experience by working with signal crews, section gangs or bridge crews, or in other ways, during his summer vacations. Certain large signal manufacturing companies take a limited number of

engineering graduates each year into a one or two year training course. A few railroads, also, have apprenticeship courses in which graduate engineers have an opportunity to learn about rattlers, drags, hoppers, shucks and cons.

Perhaps this random discussion has thrown a faint ray of light on the subject of railroading in general and railway signaling in particular. If so, it has reached its goal.



A Large Electro-Pneumatic Interlocking Machine in Use in the St. Louis Union Station

# Rocket Propulsion

Brother Harry W. Bull, Tau '32, Thrills  
the World With His  
Rocket Sled

By HARRY W. BULL, Tau '32

The following account of Harry W. Bull's thrilling experiments on rocket propulsion is taken from *The Post Standard*. Brother Bull, a Junior at Syracuse University, designed and piloted the first rocket sled in America and succeeded in maintaining an average speed of eighty-five miles an hour for the first two-fifths second of his trial run. The slushy condition of the ice caused the sled to swerve from its course, spin around and dash toward the spectators who, but for Brother Bull's cool head and steady hand, might have received serious injuries.

Harry W. Bull has kindly written for *THE GAZETTE* a discussion in which he gives a vivid picture of the possibilities of rocket motors.

Quoting from *The Post Standard*:

"A silvery little craft that roared and spat fire leaped 18 feet in two-fifths of a second over the mushy ice of Onondaga Lake yesterday afternoon, and Harry W. Bull, 21 year-old Syracuse University student, crouched in its tiny cockpit between twin streams of flame, had made the first rocket sled run in America.

"A gaping crowd was galvanized into terrified action and scattered pell-mell as the rocket sled, with flames and smoke gushing from five exploding rockets on either side, whirled dizzily about and pointed at the line of spectators.

"The excited gaze of onlookers and the grinding newsreel cameras witnessed beyond a doubt that the rocket-propelled boat was capable not only of moving, but moving with dazzling speed."

AS the climax of a large number of experiments on rockets, I designed a small streamlined sled utilizing rockets as the motive power. The purpose of the trial of the B. R.-I. was to secure actual data and practical experience in rocket propulsion.

The ultimate aim of these experiments is the development of a motor suitable to propel airplanes capable of flying in the stratosphere. This region is some eight miles above the earth's surface where the rarified air offers only one-sixth the resistance to moving objects as the medium through which we now fly.

At the present day when we wish to travel fast we must equip our plane with a very powerful motor to over-

come wind resistance which obeys the square law; that is, if a plane is equipped with a 100 horsepower motor and travels at 100 miles per hour, to increase the speed to 200 miles per hour will require a 400 horsepower motor. The large motor necessary for high speed weighs a great deal, requires more fuel and cuts down the paying load, yet at the altitude at which the rocket plane could fly a much less powerful rocket motor could propel it at the same speed.

It would seem, therefore, that any practical means by which the stratosphere could be opened for transportation would be a profitable and sane proposition.

Today throughout the world, thousands of dollars are being expended on



Beecher Harry W. Bull with Control Board

the development of the rocket motor. In Germany, rocket airports have been established, small planes powered by rockets have been flown and tests for mail rockets are being made. In the Italian Alps large rockets equipped with gyroscope stabilizers, scientific instruments, and cameras are being used in an effort to secure data on high altitudes. In our own country Professor R. H. Goddard, backed by Daniel Guggenheim is carrying on experiments which will lead to knowledge of inestimable value concerning the nature of the atmosphere surrounding our globe.

Experiments on rockets are very costly. It is a work requiring great patience and precision. Extreme care must be used in handling fuels which are more powerful than dynamite and about which little is known. In spite of the apparently insurmountable obstacles confronting the designer of a

practical rocket motor, its superiority over any present day engine serves to keep scientists ever on the search for its perfection.

Consider the small size and weight of a rocket motor in proportion to the power it produces. Recently a car was propelled by a rocket which developed two hundred horsepower yet was the size of a ginger-ale bottle and weighed only fourteen pounds.

Again, the rocket motor is one of the simplest machines known. It, in itself, has no moving parts and therefore is far more reliable than any of the present day airplane motors.

In spite of these advantages the rocket motor has one more characteristic which places it in a position of great importance—it is driven by the force of reaction. This is the force which causes a gun to recoil when discharged and our modern reaction steam turbines to revolve. This force acts regardless of the presence of any medium such as air. Thus a rocket equipped plane could fly at any altitude, or even in a vacuum!

With such a wonder motor in sight, it is not hard to realize why scientists are striving to find a substance suitable to serve as a fuel. This fuel must have terrific power, be easily controlled and fairly inexpensive. Power as employed in the manufacture of pyrotechnics is far too expensive and difficult to control. The tendency among experimenters at the present time is to use fluid propellants such as gasoline and liquid oxygen. Experiments I have made with various liquid fuels have met with some success, but the discovery of a suitable combination seems far in the future—yet it may be found tomorrow!

## In Memoriam

John Dritt died on January 14, 1931 at the age of twenty-two years from injuries received in an automobile accident near Tucson, Arizona.

From his birthplace in Aurora, Missouri, Brother Dritt moved to Tampico, Mexico where he graduated from high school. After attending the New Mexico Military Institute he entered the University of Arizona, where he became affiliated with Chi Chapter.

At his death the Sigma Alpha Epsilon general fraternity, to which he was a pledge, voted him full membership and forwarded the ensignia to his parents in Mexico City where he was buried.

To the relatives and many friends his brothers in Theta Tau extend sincere sympathy.

# *The* GEAR *of* THETA TAU

OFFICIAL PUBLICATION OF THE FRATERNITY

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*Editors*

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## FOR SENIORS ONLY

THE approach of Commencement brings another crop of seniors to the parting of the old ways and to the starting of the new. Friendships formed four years ago and welded more tightly during the passing seasons by the hammer and tongs of our brotherhood will endure forever. In many instances, however, there will be disheartening separations due to the inevitable scattering which follows graduation.

The success of these friendships should encourage you seniors to seek out brothers in the cities or towns in which you locate that you and they may continue to enjoy the association and comradeship of Theta Tau. You will find these older alumni—perhaps of your chapter—more likely of another—have a welcome for you that is sincere. You will find them glad to give you advice and waiting to help you establish yourself in your profession of Engineering. They will be glad to have your fresher views of the fraternity and particularly to know how “strong” your chapter is. They may even regale you with stories of the “good old days”. You will find

them perhaps not so intimate, but nevertheless as true friends as are your classmates.

In hand with these new friendships which we most earnestly advise you to cultivate may we modestly suggest that you give serious consideration to THE GEAR as an old friend from whom graduation need not cause separation. Your magazine, upon request, will gladly follow you to the corners of the world, if that is necessary, to be with you. To keep in step with the Fraternity, to follow its Convention legislation, its expansion and growth and to keep in touch with your chapter and with many classmates you will find THE GEAR most valuable. Some seniors are already Life Subscribers. All should be, especially in view of the liberal provision made in the legislation establishing these subscriptions permitting active members initiated before this plan was adopted to secure the magazine for life upon payment of only five dollars. This is indeed a bargain. Won't you take advantage of it by sending in your subscription before you graduate? Payments should be forwarded to the Grand Treasurer through your chapter officers.



F. W. MARQUIS    P. W. OTT    W. T. MACRAIDER  
Executive Council of Tau Beta Pi

#### THE TAU BETA PI CONVENTION

To all conventions of the honor societies that are connected with engineering, various members of Theta Tau are sent as delegates. This was true again of the late convention of Tau Beta Pi held at Lehigh University at which Brother P. W. Ott, Sigma '17, was elected President, and Brother F. W. Marquis, Sigma Hon., was elected to the Executive Council. In addition to these two as officers the following Theta Taus served as delegates of their respective Tau Beta Pi chapters. J. L. Hyde, Upsilon '31, R. M. Hamon, Alpha '31, R. Z. Williams, Iota '31, E. L. Auyer, Tau '31, R. I. Claassen, Omicron '31, and G. G. Quarles, Pi '31. We wonder how many of these men met each other as Theta Taus and exchanged greetings.

#### MUTUAL ADMIRATION SOCIETY

THAT is a name which we hope can never be applied to a chapter of Theta

Tau. The national council strongly favors the policy of definite chapter objectives. Those chapters which have followed such policies have been rewarded by a sense of satisfaction and accomplishment. We urge all actives and especially the officers for the coming year to read thoughtfully the excellent message of the Grand Regent. Brother Russell's discussion should receive serious attention from the active members of the fraternity.

#### THE SCRIBE

PUBLICITY is a word which comes yearly into greater prominence. Hardly any organization or individual would refuse favorable publicity. Human nature is such that we all like it (and most are honest enough to admit it). Such being the case, why should we refuse to take advantage of opportunities for favorable publicity?

The activities and achievements of Theta Tau chapters remain unknown

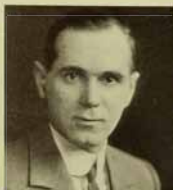


and unsung for the most part unless the fraternity world is apprised of them through the pages of *THE GEAR*. *THE GEAR* cannot do justice to the chapters without intelligent co-operation.

The editors hope, therefore, that when the officers for the next year are chosen that particular attention be given in filling the office of scribe since he is the contact man between

the chapter and the outside world. He should have a good command of English, a smooth and easy style and a supply of enthusiasm which will enable him to prepare faithfully clear and concise accounts of his chapter's activities. He is the man upon whom you are to depend for your publicity for a year. Pick a man who has natural qualifications. There is always one such in the organization.

### THE PROFESSIONAL INTERFRATERNITY CONFERENCE



JAMISON VAWTER

At a recent meeting Jamison Vawter, Zeta '16, Grand Treasurer of Theta Tau, was elected Vice-President of the Professional Interfraternity Conference.

#### OFFICERS FOR THE YEAR 1931

*President*—Dr. R. C. Williams (Theta Kappa Psi—Medicine), U. S. Public Health Service, Washington, D. C.

*Vice-President*—Professor Jamison Vawter (Theta Tau—Engineering), 217 Engineering Hall, University of Illinois, Urbana, Ill.

*Secretary-Treasurer*—J. D. Sparks (Alpha Kappa Psi—Commerce),

1325 Circle Tower, Indianapolis, Indiana.

*Executive Committee Members*—The above and Jarvis Butler (Sigma Nu Phi—Law), 100 Morgan Place, Rosemont, Alexandria, Va.; Dr. Alfred P. Lee (Psi Omega—Dental), 235 South 15th Street, Philadelphia, Pa.

#### MEMBER FRATERNITIES 1931

<i>Architects</i>	
Alpha Rho Chi	Scarab
<i>Chemistry</i>	
Alpha Chi Sigma	
<i>Commerce</i>	
Alpha Delta Sigma	Delta Sigma Pi
Alpha Kappa Psi	
<i>Dentistry</i>	
Psi Omega	
<i>Education</i>	
Kappa Phi Kappa	Phi Epsilon Kappa
Phi Delta Kappa	
<i>Engineering</i>	
Sigma Gamma Epsilon	Theta Tau
Sigma Phi Delta*	
<i>Law</i>	
Delta Theta Phi	Phi Beta Gamma*
Gamma Eta Gamma	Sigma Nu Phi
Phi Alpha Delta	
<i>Medicine</i>	
Alpha Kappa Kappa	Phi Chi
Alpha Mu Pi Omega	Phi Delta Epsilon
Nu Sigma Nu	Phi Rho Sigma
Omega Upsilon Phi	Theta Kappa Psi
Phi Beta Pi	
<i>Pharmacy</i>	
Kappa Psi	Phi Delta Chi

\*Indicates Junior Classification.

# Building Strong Chapters of Theta Tau

A Stimulating Message from Grand Regent  
Richard J. Russell

Brothers in Theta Tau,  
Greetings:

DURING a recent trip I had the good fortune of renewing friendships with several of the officers and other dominant personalities in Theta Tau. At such meetings it is always natural that the Good of the Order is discussed, both in prospect and in retrospect. In reviewing the past one sees chiefly a record of achievement, but one not free from disappointment. Most of our chapters manage to succeed. A very large portion of the alumni appear to have left school with an intimate notions of the ideals and purposes of Theta Tau. But the record also contains both alumni and chapters that have fallen by the wayside. Certain chapters seem to exist without purpose. One can hardly refrain from considering the philosophy of the situation.

By their deeds shall ye know them? Isn't success or failure determined by the activities of a chapter, as it is with individuals? Is not the most constructive approach to the problem of strengthening chapters concerned with an analysis of the activities of successful chapters? I have been working along that line for several years and expect, in the near future,



RICHARD J. RUSSELL

to supply all chapters with a list of possible activities that have already been tested and found true. I hope that this list will prove stimulating and that it may suggest the very things some chapters have been seeking but have either not yet found, or else have not been able to formulate into successful action.

I can see no valid reason why a Theta Tau chapter should be weak. The broader my experience the more I become convinced that the position

of the Professional Fraternity is essentially sound, and that it should be the most respected and most valuable of organizations on any university campus. General Fraternities succeed, so apparently the bond of Fraternal Brotherhood, based upon the desire to select the persons you like best for your closest associates, is sufficient to insure the success of a collegiate organization. The Professional Societies succeed, so apparently men who are following the same line of endeavor, who spend a large portion of their time thinking along similar lines, are capable of being bound together into successful organizations. Even such loosely cemented bonds as must exist between men of such comprehensive classes as Merchants, Boosters, or those who desire to play a certain game, swim in a certain tank, etc., form a sufficient basis for some of the most successful organizations. How fortunate is the Professional Fraternity in having the most essential of bonds, a combination of Brotherhood and Similarity of Professional Interests! The oldest alumnus of the Professional Fraternity speaks the same language and thinks along the same general lines as do the active members of his chapter. Alumnus, see whether that is true in the case of your General Fraternity!

It is patent that Undergraduates tend to worship false Gods. It is the exceptional man who realizes even the most moderate return from his collegiate investment. Yet records show that an amazing percentage of serious students rise to the greatest eminences in life! The Phi Beta who made a street car conductorship remains long and impressively in the mind of the

perennial Sophomore. That a very large proportion of the men directing our Government, our most successful corporations and banks, were also Phi Beta is of comparatively little popular interest. And so the Knife and Skull, Corkscrew and Coffin, or similar organizations is usually considered an appropriate recognition of a successful college career. The worthy Professional Fraternity, with its high ideals, concrete help, and life-long associations may only become a very minor side show in the undergraduate circus. Tomorrow's leaders are now on our campuses. As Theta Tau chapters we are probably specializing in them. Having visited the greater number of our chapters I will vouch for our personnel. But quite often, after visiting a chapter, I wonder why it is that some of our best chapters from the personnel standpoint actually seem to accomplish so little. To some extent it seems to arise from the worship of false Gods, but, and to probably a greater extent, I think that it results from incomplete instruction as to the possible activities that Theta Tau chapters actually engage in; a failure to realize the potentialities of the Fraternity. Therefore I hope that when my "Chapter Activities" circular reaches you it will be given serious consideration.

From time to time the suggestion has arisen that certain Professional Fraternities, including our own, have a peculiar and unstable condition in that two types of chapters seem to exist, some with houses, the majority without. I am not receptive to that idea. To me the condition seems perfectly logical and the only one possible with such varied conditions exist-

ing at different Universities. I see no differentiation of chapters into any two such classes. This is because I see that the fundamental problems of all chapters are essentially the same. To maintain a successful chapter house is not to maintain a successful chapter of a Professional Fraternity. To maintain Loyalty, toward Brothers, toward School, and toward Profession constitutes a far better measure of success. An organization that only fills a real need in being able to provide board and lodging is certainly far from the ideals of Professional Fraternities. The growth and success of Theta Tau has demonstrated that, as a whole, the Fraternity is filling a real need in University and Engineering life. Each successful chapter is demonstrating that it fills a real need on its local campus. Whether Brothers are fortunate enough to be housed mainly under the same roof is a rather minor matter. A house may function perfectly, become the pride of the campus socially, and still house a failure of a Theta Tau chapter. The professional activities of a Theta Tau chapter should be about the same whether it has a house or not. It is possible that the non-house chapters tend to underestimate the social side of fraternal life and that the house chapters may give it undue emphasis, but, after all, such differences are minor and are easily smoothed out. Thus, after starting with the idea that two lists of chapter activities should be prepared, I have come to the conclusion that but one is necessary. Early in the analysis as to what our successful chapters are doing I found that there is hardly an activity but what can be followed by a chapter, whether it maintains a

house or not. If this conclusion is sound it seems obvious that there is no essential difference between the two types of chapters. Of course, if we wished to convert ourselves into a General Fraternity, and some former Professional Fraternities have done that, it would be undesirable to have non-house chapters. But, I trust, such action is farthest from our purposes.

About half of our chapters are being visited by a member of the Executive Council this year. We regret that it has been impossible to visit them all as this is the between convention seasons when chapters tending to display weakness are most likely to lapse into dormancy. This reminds us that it is time to begin plans for the next convention, for next Christmas each chapter will be sending its representative to help mould the future of Theta Tau.

With kindest regards and the hope that each chapter and alumnus is enjoying the best of everything, I am

Yours in H & T,

RICHARD J. RUSSELL,

Grand Regent.

#### FRATERNITY FABLES

By the Old Timer

A chapter was once holding a meeting when a brother arose and cried: "Alas, the alumni do not give us of their support."

But when the years had passed and the brother was graduated, and had passed on to be among the alumni, did he give of his support either by word or deed? He did not.

Moral: "Consistency, thou art a jewel."

*The Arch of Alpha Rho Chi*

# Beta Celebrates Twenty-Fifth Anniversary

On March 28 Beta Chapter assembled to commemorate its founding twenty-five years ago. The chapter has furnished THE GAZ. with a history of Beta's early years and on account of the celebration held at the chapter house.

BETA CHAPTER of Theta Tau had its origin as most fraternities of like nature have in a particular social, economic and fraternal demand. The demand was a highly keen and insistent one born of a natural desire of a group to become better acquainted socially and possibly thus link their lives into a chain of life-long friendship.

The spark that set off the powder in this particular case was the discovery that one of the gang had been secretly married several days before. A "charivari" was decided upon as the proper form of celebration for the occasion and the group proceeded to locate the newlyweds and to extend congratulations with the usual noise makers and demands of substantial material recognition before the din would cease. During the feed that brought the charivari to a close it was proposed that the group form a perpetual organization. As a result there came into being in October, 1903, the Rhombohedron Club.

That no one should be slighted, it was agreed that the honor, glory, and worry of holding office in the club should be passed around among the members and it was decided to elect new officers every three months.

A constitution was proposed and

adopted, the preamble of which read, "For the purpose of promoting the fraternal ties formed in college life and for helping each other in and out of college, we, the undersigned, as a matter of business and also for common usage do hereby sign and agree to conform to all articles set forth in this Constitution." The men who signed the constitution as charter members were A. H. Meuche, George A. Anderson, Robert Lee Downing, G. M. Burke, Tom McCormack, James A. Barr, A. L. Gerry, Wilfred G. Sweeney, H. P. Steinbach, James A. MacKillican, John E. Wagner, Alfred L. Smith, Paul H. Wilkinson, Fred K. Houston, H. M. Merry, Geo. B. Marshall, R. B. Phillips, Charles A. Kumke, J. Barnett Torbert, and A. Hasselbring.

A. H. Meuche, 1903, was the first presiding officer. The initiation fee was set at five dollars and the dues two dollars per month. Two rooms were rented for club purposes, and the essential parts of the initiatory ceremonies seemed to consist of the payment of five dollars and the presentation of a key to the door of the rooms.

At a meeting held November 14, 1903, the question of an affiliation with a Chapter which had been formed at the University of Minnesota during

the Fall of 1904 known as the "Hammer and Tongs" was discussed. Membership in this fraternity was limited to students in mining engineering. For several meetings held subsequently letters were read and much discussion held until January 11, 1906 when the general sentiment seemed unanimous in favor of joining with the Hammer and Tongs Fraternity. A committee was appointed at this meeting to formally petition Alpha Chapter for affiliation. A charter dated March 26, 1906 was granted to Beta Chapter.

The first meeting of Beta Chapter was held on April 6, 1906, and the following enrolled as charter members of Beta: Robert L. Downing, W. B. Andrews, G. M. Burke, G. B. Marshall, G. A. Anderson, J. A. MacKillican, Charles A. Kunkle, A. Hasselbring, J. A. Barr, W. G. Sweeney, H. P. Steinbach, J. B. Torbert, R. B. Phillips, F. K. Houston, and A. H. Meuche. Robert L. Downing was elected first Regent and George A. Anderson, Scribe. At this first meeting G. B. Staples, J. E. Thoms, F. W. Varney, B. O. Pickard, R. B. Earling, J. D. Wamvig, and C. J. Kingston were elected to membership.

The social committees were evidently very active during this period as the minutes of nearly every regular meeting record a vote to have a spread of some kind and an assessment to pay for the last one. There was also a certain amount of pride possessed by a majority of the members in personal appearance, and evidently a laxity on the part of a few, as the minutes record a motion that all brothers be requested in the future to dress presentably at all times, and on Sundays the attire should include a white collar.

As is the case with most fraternities, Beta Chapter has had its ups and downs, financially and otherwise, but seems always to emerge better and stronger than ever. Among the outstanding accomplishments of the Chapter and its members may be listed the following:

Beta Chapter compiled and published the first GEAR, and issued this publication during the years 1908-09-10-11-12. It published the first directory of Theta Tau members, and was the first Chapter to issue a regular bulletin. It was the first Chapter to have a regular house committee, the first to establish a fund and a stock company for the purchase of a Chapter house, and the first to own its own home. The official Theta Tau song was written by Don C. Blackmar, Beta, 1911, and the present official pin was designed by E. H. Snyder, Beta, 1912. Beta was host to the second national convention in 1913.

Since more or less of a brief history has been given so far, a rather large step must be taken to the present time and short resume of our celebration.

We now have the largest membership that Beta Chapter has ever had. We have a full quota of thirty-five actives, thirty of whom are living at the house. No less than fifteen actives are seniors who will be graduating within the next few months. There are three pledges in our list, all taking mining. Prospects look good for another bright year.

Beta was given its charter on March 26, 1906 but as the 26th of this year was on Thursday the occasion was moved to Saturday, March 28. The guest of honor was H. H. Hopkins of

Chicago, who represented the executive council. His talk conveyed the greetings and message of the national officers. Professor Fisher also gave a very inspiring speech, mainly a resume of the chapter from the beginning. Both talks went over in great style and were very interesting to all the Brothers. Among the other alumni present were C. G. Sheldon, R. W. Drier, Carl Knaebel, P. Paquett, Wm. Longacre, H. Hawn and L. Tonne. Brother C. A. Kumke of Ray, Arizona found himself unable to attend the reunion but sent in his place a poem which expressed his feelings and merits reprinting:

An old "Rhomb" sat in his office chair  
With a heart full of woe and a look of despair,  
And his voice came low on the evening air,  
I can't make the grade—BY THUNDER!

When all of the brothers are gathered 'round,  
When songs will cheer and fun abound,  
You won't be there, you poor old hound,  
You'll be out in the sticks—BY THUNDER!

You could tell how the old "Rhombs" got their name  
And who was the first called the "Basel Plane",  
The "Intersections" and "Edges" were all in the game,  
You could tell them a lot—BY THUNDER!

But here you sit in your office chair,  
After twenty-five years—not a day to spare,  
You can't take the time—you won't be there,  
You'll be rustling more muck—BY THUNDER!

You might take a stroll on over the hill  
And call on old Dan with his copper still,  
And hoist a few—and I think I will;  
I'll drink Beta's health—BY THUNDER!

After the banquet, which was held at the chapter house, and the principal speeches were over, the meeting was adjourned, a very original informal session was held with everyone taking an active part. The celebration was a success in each and every part with each active putting forth his effort to make the event as such. We only hope that more alumni will be able to be present at our next celebration in the future.

The following is the report of H. H. Hopkins, Past Grand Scribe and first Editor of THE GEAR. Brother Hopkins represented the Executive Council at the Beta Anniversary.

The Silver Anniversary Celebration on March 28th, of Beta Chapter, was a huge success.

It seemed rather odd to land in the copper country and find no snow on the main streets, and very little showing in the woods. The weather man corrected that within an hour, and an old fashioned blizzard set in.

Beta Chapter is very comfortably lo-

cated in a large house, directly across the street from the west end of the campus. On account of the large number of actives in the chapter at the present time, the house is rather crowded, but the graduation of fifteen men this Spring will bring the number down to normal proportion.

It was very interesting to talk to the president of the college, the dean of men, the professors of the three main divisions of engineering, and get such excellent reports of the chapter. The personnel is very highly spoken of by everyone. An inspection of chapter records disclosed the fact that the chapter was in excellent financial condition.

Due to a very strenuous schedule, the celebration was confined to one day, which started with a luncheon on Saturday, and wound up with a banquet in the evening at the fraternity house. Many alumni from the faculty and surrounding towns were present, and much time was spent in reminiscences. The high lights of the banquet were the reading of the communication from the Grand Scribe on the Engineering Fraternity and the story of the founding of Beta Chapter, by Professor Fisher. Many stories were also told regarding the individual men who made up the original club.

Beta Chapter is very enthusiastic in its support of the national fraternity. The men are very responsive to fraternal association.

Beta enjoys a very enviable position on the campus with the faculty and the non-fraternity men. Beta also enjoys the interest of the residents of the copper country. Telegrams and letters were received from all National

Officers and Alumni Associations. Many of the alumni took advantage of the occasion to send their greetings and congratulations. These letters and telegrams were read and enjoyed by all.

The record of Beta Chapter in fraternity and college affairs over twenty-five years is very commendable. The present chapter on the campus is a great credit to the national fraternity, the college at which it is located, and its alumni. It is a pleasure to congratulate them upon their success, and we hope that they will enjoy another period of twenty-five years of usefulness, even greater than in the past.

#### EXCERPTS FROM BROTHER HOPKINS' ADDRESS TO BETA CHAPTER

"It is difficult to land suddenly on the old campus, greet your friends on the faculty, look over the cherished scenes of a college career, meet the men of the chapter, and depend on mere words to express feelings.

"It is my purpose to bring you the congratulations of the Executive Council, the greetings of a host of alumni with whom I am well acquainted, and also my personal good wishes. Most of you know the members of the Executive Council by name only. It has been my privilege to serve with them in the years past, and you may be interested in the personalities of each. It is these men, members of the Executive Council, who send to you, through me, their personal good wishes and congratulations on your Silver Anniversary.

"I have watched the chapter grow from a group of twenty men to a membership of over three hundred. I



have watched them through the war excitement, post war depression, college expansion and financial difficulties.

"I have watched the national fraternity grow from two chapters, to more than twenty, and Beta has always been one of the foremost. One factor in its success has been its loca-

has been fortunate in its honorary members from the faculty, who have affiliated with the chapter. They have lent their counsel and encouragement at the time that it was most needed. The alumni in the faculty and in the copper country have also been a great source of strength to the chapter.

## BETA



FRONT ROW—Westwater, Rowley, Wala, Owens, Gruber  
 SECOND ROW—Tilson, Gaynow, Becker, Baker  
 THIRD ROW—Fronette, Yonne, George, Pipin, Criscione  
 FOURTH ROW—Lord, Fiedler, Spencer, Thomas, Werkowski  
 FIFTH ROW—Young, Williams, Brophy, A. Hawn  
 REAR ROW (Continued)—Webb, Foster, Schröder, Blanchard, Gertz, Angst,  
 Atkins, Johnson, C. Hawn, Walter, White, Swischart, Zwart, Putnam

tion at Michigan Tech, away from the environment of the large metropolis, and in the heart of the copper industry. It is located on the most democratic and independent campus, to my knowledge.

"Students of Michigan Tech are in the habit of standing on their own feet, and this fact is reflected in the accomplishments of Beta Chapter. Beta

They have also contributed a great deal to the technical literature of the mining and industrial field.

"It is gratifying to hear the excellent reports of the personnel of the chapter, both from within and without the copper country. All the fraternity chapters have their ups and downs, their moments of strength and weakness. Your history has been no

exception to this, but the marvelous comeback, overcoming financial difficulties, shows the great strength and firm foundation of Beta Chapter. Beta has been a credit to the national fraternity, and to the college at whose campus it is located. Its alumni are scattered to all four corners of the world.

"The Executive Council want you

to know that they are proud of you. Your alumni are enthusiastic over your success. Those of you who graduate can go out with the feeling of a job well done, and the under-graduates can take pride in the prestige which you now enjoy, and resolve to carry that prestige to even greater heights in the coming years."

#### NEW ENGINEERING BUILDING AT MICHIGAN COLLEGE OF MINING AND TECHNOLOGY



The new engineering building has four stories of modern design and is constructed in two wings perpendicular to each other, forming an L section. The dimensions of the main wing are sixty-five by one hundred sixty feet and those of the rear wing are forty-eight by one hundred nine feet, making the largest building on the campus. Classes have been held in the building ever since the first of the year. As yet there has been no formal dedication, but if plans materialize it will

be held early this spring. At the present time there are three departments of the college housed in this building. They are the Mechanical, Electrical, and Geology Departments. The building is equipped with the most up to date material and machinery for the use of the students. One can only realize what we have here by seeing the entire building. The cost of the building fully equipped was \$400,000.00, making it the most outstanding one on the campus.

# Letters From The Chapters

## ALPHA

Alpha started the school year with twenty active members. During the fall quarter the following men were initiated: E. H. Finch, A. Hutchings, and J. W. Skovholt. From Beta Chapter we were glad to welcome Brother G. F. Weigel as an affiliate member.

E. W. Murphy, Inner Guard; J. E. Dowd, Outer Guard; M. G. Sedam, Corresponding Secretary.

Chief among our social events of the year was our Founders' Day Banquet held at the Francis Drake Hotel in Minneapolis. P. A. Laurence, Alpha '11, was our toastmaster, and G. M.

## ALPHA



FRONT ROW—Biles, Werner, Hanson, Grover, Oberg  
SECOND ROW—Agather, Weigel, Peterson, Christoph, Kullberg, Hill  
THIRD ROW—Hutchings, Thomson, Ramsdell, Skovholt, Dowd  
BACK ROW—Nylund, Anderson, Brimhall, Sedam, Abrahamson, Snides

At our last meeting the following men were elected to hold office for the coming year: C. O. Anderson, Regent; G. B. Brimhall, Vice-Regent; L. J. Oberg, Scribe; D. F. Abrahamson, Treasurer; T. A. Nylund, Marshall;

Shepard, Alpha '09, was the principal speaker of the evening. Mr. Shepard came fresh from conquering the mighty Mississippi. He had just completed the new locks at the Ford Dam, a project which many said could not

be put through. Mr. Shepard had a wonderful and inspiring story for us. After the banquet a meeting of the Theta Tau Association, Inc., was held. A new chapter house for Alpha was discussed. Our other social activities have consisted of two dances. One was given on Homecoming night and the other on February 27. One more dance during the spring quarter will complete our social program for the year.

In intramural sports, teams were entered in touchball and basketball. While there are no new trophies to decorate our mantle, both teams made creditable showings. The prospects for our kittenball team look exceptionally bright.

As to honoraries, we are fairly well represented. In Brother Hanson we have the President of Tau Beta Pi. In Pi Tau Pi Sigma we have Brother Biltz as President, and Brothers Soules and Agather. Brothers Anderson and Colberg are in Pi Tau Sigma; here again we have the President in the personage of Brother Anderson. Brother Biltz in Scabbard and Blade; Brother Soules and Pledgeman Howe in Phalanx; Brother Ramsdell and Pledgeman Gregg in the Mortar and

Ball complete our list of honoraries.

In other campus activities, Alpha has two juniors and two seniors in the Green Tie, a newly organized social group for professional engineering fraternities only. Brother Agather is a member of the Crack Drill Squad and has recently been chosen as chairman of the electrical show. Brother Oberg is President of the Junior Class in the Mines School. It has just been announced that Brother Oberg is also to be Chairman of the Miners' Banquet. Brother Ramsdell is President of the Technical Commission, while Brother Brimhall serves on the Union Board of Governors.

This spring Alpha will lose eleven of its members through graduation. To partly compensate for this loss, however, we have sixteen pledges, seven of whom will be initiated within the next two weeks.

Our chief concern at the present time is to find men who will live at the house. Taking things as a whole, however, Alpha is experiencing a very successful year.

Greetings and best wishes to all.

M. G. SEDAM, '33

Minneapolis, Minn., March 27, 1931.

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## GAMMA

The Gamma chapter of Theta Tau pledged the following men on March 10, 1931: P. G. Sharp, L. Knill, J. D. Hollenbeck, L. L. Fernald, K. Brierly, M. E. Volin, M. Gardener, J. Rump, H. Putz, A. C. Switsavage, and R. Johnson. The pledging was conducted in the usual form. Initiation is to be held in the near future at the Cosmo-

politan Hotel in Denver. Following the initiation there will be a banquet.

At present there are twenty-five active members. The following Seniors will graduate this spring: R. W. Wilson, Ken Dickey, J. L. Robison, C. L. Barker, Chas. Bonnett, I. G. Burrell, Jack Coolbaugh, J. E. Woodburn, C. Wilkerson, Ted Carter. Tau Beta Pi

initiated three of our brothers this semester, viz., C. L. Barker, Art Ben-  
net and Claude Wilkerson.

The annual Theta Tau dance was  
held on Friday, March the 13th. The

officers for the coming year have not  
been elected.

C. L. BARKER

Golden, Colorado, March 23, 1931.

## DELTA

Total number of initiates . . . . .	302
Number of actives . . . . .	28
Number initiated this college year . . . . .	18

The beginning of school this year  
found ten old men back to carry on  
the work of Delta Chapter. In No-  
vember twenty-five men were pledged  
to Theta Tau and on December 2 an  
initiation was held in the rooms of the  
Department of Geology and Mineral-  
ogy at Case School. The initiation  
was followed by an excellent dinner  
at the Cleveland Club. The speaker  
of the evening was Professor F. Car-  
lton, who is Professor of Economics at

Case School of Applied Science. C. R.  
Glass, who is the secretary of the  
Cleveland Alumni Association, spoke  
on the organization of the Alumni.  
Those initiated were: F. Roodman, G.  
N. Gray, R. W. Simon, R. E. Haas,  
D. S. Klippert, C. F. Firmin, from  
the class of 1931, and H. J. Kirk-  
stadt, C. M. Hannum, D. D. Leslie,  
J. H. Baird, H. D. Baker, R. E. Eric-  
son, F. A. Webber, J. A. Barth, D. F.  
Dempcy, H. C. Fell, A. H. Glasenapp,

## DELTA



FRONT ROW—Barth, Ehinger, McLain, McGraw, Benion, Leach, Erickson  
MIDDLE ROW—Glasenapp, Dempcy, Firmin, Shaffer, Weppner, Binder, Baird, Fell  
BACK ROW—Simon, Baker, Kirkstadt, Gray, Firmin, Haas, Webber, Dill

and M. W. McMillan, from the class of 1932.

Our high service and scholarship requirements seem to be successful for five of the brothers are also members of Tau Beta Pi. They are: M. A. Weppner, E. L. H. Bastian, G. N. Gray, W. O. Binder and H. J. Kirkstadt. However, scholarship is not our only accomplishment or desire. Our members are also participating in campus activities. M. McGrew, our Regent, is just closing a successful career as editor of the Case Tech, and with him F. P. McLain, the business manager. At the close of the late football season M. A. Weppner, C. H. Hannum, A. H. Glasenapp and W. O. Binder received their letters. The end of the basketball season was just as successful. Those who received letters were: Leslie, Persons, Dempsey, Dill and pledge Camereron. In swimming McGrew and Hannum received letters, and in wrestling, Webber. Case Honor Keys are to be awarded to eight men for commendable participation in student activities.

It is with regret that at this time Delta Chapter is unable to report the names of the officers for the year 1932.

Delta Chapter does not hold its elections until after the first of April. The present officers are: M. McGrew, Regent; F. S. Ebinger, Vice-Regent; F. P. McLain, Scribe; J. T. Leach, Treasurer; W. O. Binder, Corresponding Secretary.

At the present time we are holding meetings every two weeks. Since there are nine members of Theta Tau on the faculty at Case School, Delta Chapter has adopted the policy this year of calling on these men to deliver an informal talk at these meetings. These talks have been very interesting, and they have ranged from the benefits of graduate study to the making of steel. Delta Chapter wishes to take this opportunity to thank formally these loyal members for their interesting and instructive talks.

As always, Dr. F. R. Van Horn has been giving much of his time and attention to Delta Chapter. His guidance and leadership is greatly appreciated by the members of Delta Chapter.

WILLIAM BINDER, '31

Cleveland, Ohio, March 26, 1931

## EPSILON

Total number of initiates . . . . .	331
Number of actives . . . . .	37
Number initiated this college year . . . . .	11

Epsilon Chapter has been engaged as usual in its continuous round of activities. Nine new men were taken in at the initiation on March 21st, followed by our semi-annual banquet which was held this time at the Hotel

Mark Hopkins in San Francisco. Brother George Smith, '11, is manager there. We were greatly honored at our initiation and banquet in having with us Brother Erich J. Schrader, Grand Scribe. He gave us a very ex-

cellent talk on the principles and outlook of the fraternity.

The new men are: Robert E. Baker, Allen P. Bowie, John Bradley, Lloyd M. Brailley, Albert A. Fitch, Wesley Hyatt, Thomas H. McClelland, Roger Revelle, and Leslie A. Smith. The

sure that the new members will fill in their places as they learn more about Theta Tau.

Some of our men have been honored in other societies recently. Brothers Fitch and Bradshaw were recently installed in Sigma Xi, while Brothers

## EPSILON



FRONT ROW—Jones, Victoria, Stevenson, Chamberlain, Goldsmith, Oliver, Bedford, Cornwall, Hanan, Fitzgerald

BACK ROW—Prof. Morley, Jensen, Cory, Dr. Williams, Simpson, Prof. Henson, Prof. Uren, Dr. Anderson, Dawson, Rand, Fairbank, McQuiston, Rhodes, Prof. Probert

active chapter had a chance to get acquainted with the neophytes at an open house held on February 27th. Dr. C. L. Camp, Curator of Amphibians and Reptiles in the Museum of Paleontology, gave us a very interesting talk on his work in Arizona and elsewhere in the game of fossil-hunting.

Epsilon has thirty-seven actives now, including the initiates. We are losing 14 men in May, but we feel

Bedford and Goldsmith are now members of Tau Beta Pi.

Our officers this semester are: Regent, C. Fairbank; Vice-Regent, F. McQuiston; Treasurer, S. Cornwall; Scribe, E. J. Bradshaw; Corresponding Secretary, L. R. Goldsmith.

Members of Epsilon are planning their usual spring time outing to the Russian River, where a great week-end is always had by all. This year will be no exception, we are sure.

Brother Bill Cory, '29, recently visited us and spoke on the Paleontology and Geology of the Vaqueros and Temblor formations of the Lower Miocene of California.

We, of Epsilon, extend Fraternal good wishes to all.

LOUIS R. GOLDSMITH, '32

Berkeley, California, March 24, 1931

## ZETA

Number of actives . . . . .	33
Number initiated this college year . . . . .	14

The approach of Easter recess finds Zeta Chapter with a new group of officers elected to carry through the spring term. The new officers are: Donald Bonjour, Regent; Irving Coffman, Vice-Regent; Charles Clutz, Scribe; and Clair Wood, Treasurer.

On March 15 the chapter held initiation for Harry Green, El. '33, Robert Glue, Mech. '32, and Edward Boehm, El. '32. The addition of these three members brings the chapter roll to a total of thirty-three.

During the past few months the following men have been pledged: John Redmond, El. '34; Chilton McLaughlin, Civil '32; Lee Scheurman, Mech. '34; Marcus Johnson, Mech. '32; Herschel Mathes, El. '33; Chester Austin, Mech. '34; Raymond Hahn, Mech. '32; J. A. Campbell,

Mech. '33; Arthur Banks, El. '33; and Howard Glasgow, Civil '34.

Zeta Chapter is well represented in departmental activities, having Brother Bonjour as President of the A. S. C. E. and Brother Worner as President of the A. I. E. E. Also, the chapter is well represented on the Engineering Council.

The last election of Tau Beta Pi here at K. U. included the following names from Zeta: Irving Coffman, Jack Worner, Clair Wood, Henry Hood and L. C. Hopkins, Jr.

The chapter is planning to hold a formal party at the Lawrence Country Club on May 1st and the prospects are for a large crowd and a lot of fun.

EUGENE MANNING, '33

Lawrence, Kansas, April 1, 1931

## THETA

Total number of initiates . . . . .	168
Number of actives . . . . .	15
Number initiated this college year . . . . .	7

The chapter has been continuing the activities of the year in full force; the usual weekly meetings have continued to be a cultural inspiration,

and have at all times been very well attended.

The active Brothers in the chapter are Stephen R. Bradley (Regent), John



French (Vice-Regent), W. M. Brown (Scribe), Charles Ross (Treasurer), George Wilbur, Herbert Knapp, Gordon Dunlap, Mellward Heath; also, as fraters in facultate, Theodore Baumeister, Alfred Huichley and Professor T. H. Harrington.

Clifford, '31, Forest Grant, Jr., '31, Heaton B. Hefelfinger, '32, George F. Jenkins, '32, Claude J. Kirkland, Jr., '32, Lloyd F. Kniffen, '32, and Charles J. Mason, '32.

An informal dinner was held at John Jay Hall on March 16, to which

## THETA



FRONT ROW—Knapp, Grant, Ross, Wilbur, Bradley, French, Harrington, Baumeister  
BACK ROW—Clifford, Jenkins, Kirkland, Brown, Hefelfinger, Dunlap, Mason, Heath, Madison

We are happy to congratulate Brother Dunlap, '32, on his marriage to Miss Evelyn Spear of Leonia, New Jersey, on September 25.

The Fall initiation was held at the Columbia Club on December 19, and followed by a very happy and successful banquet there, Theodore Baumeister being the chief speaker. The following were initiated: Geoffrey E.

alumni and rushees were invited; Professor T. H. Harrington, Theta Hon. '89, gave some reminiscences of his experiences after graduation.

The annual "Schoolboy Day" organized in conjunction with the faculty was participated in by all the active members of the chapter. The chapter holds a strong position in the administrative phase of the Engineer-

ing School, having Brother Bradley, President of the Student Council, and Brother Wilkins, Secretary. Brothers Brown, Heath, Heffelfinger, and Kirkland are also members of the Student Council.

The Engineering School annual, the *Columbia Engineer*, is largely administered by Theta Tau this year, with Brother Clifford, Editor-in-Chief, Brother Bradley, Associate Editor, and Brother Kirkland, Assistant Editor.

Theta Chapter has been active along other social lines, organizing a combined dance with Tau Beta Pi and the Honorary Senior Society of Dumbbells on April 24.

The spring pledges include Prescott H. Blatterman, '33, Robert T. Brown,

'33, William Stringer, '33, Arthur N. Hickson, '33, Richard H. Ludeman, '33, John Hughes, '33, Henry Voorhis, '33.

Theta is particularly honored by the election to Tau Beta Pi of Brothers Reginald Herbert Knapp, '31, and Millward W. Heath, '32, and of the election to Sigma Xi of Brothers Bradley, Clifford, French, Grant, and Wilkins, and of Brother Clifford to Phi Lambda Upsilon.

In closing, Brothers of other chapters, we extend to you our best regards, mingled, perhaps, a bit with regret that we cannot express them in a more personal manner.

W. M. BROWN

New York City, N. Y., March 28, 1931

## IOTA

Total number of initiates . . . . .	263
Number of actives . . . . .	40
Number initiated this college year . . . . .	3

The regular fall initiation at Iota found five new names being added to the chapter roll. These men were Rex Monroe, William Makin, A. J. Williams, R. L. Kirkpatrick, and J. F. Frewer. As is the custom here, a dance was given in honor of the new men immediately after the initiation.

At the spring elections of Tau Beta Pi, two more Theta Taus were voted into that association. These two men, A. S. Macke and Rex Monroe, bring our representation in Tau Beta Pi up to seven men, the others being W. J. Ware, R. Z. Williams, V. F. Ancell, B. S. Followill, and E. W. Heilig.

Last fall's elections to Phi Kappa Phi saw B. S. Followill, W. J. Ware,

and R. Z. Williams selected as members of that society, thus giving Theta Tau three men in Phi Kappa Phi.

In an athletic way, Iota has been extremely fortunate this year. Frank Malik has been elected to captain the 1931 football team, E. W. Heilig has just finished leading the varsity basketballers through a successful season, and Rex Monroe is at the present time serving as captain of the varsity track squad. Another member of Iota, F. M. Thoroughman, has been president of the Athletic Association this year.

Of the honors falling to the chapter on the campus, we must consider the selection of James Offut as St. Patrick for the annual St. Pat's celebra-

tion as being outstanding. Fred V. Schmitt is president of the St. Pat's Board of Control, and its treasurer is A. S. Macke. J. K. Richardson and E. O. Crawford are active in the M. S. M. Players.

Plans are already being laid for Theta Tau to sponsor a complete series of open lectures for next year. The series is to be topped by having an out-of-town speaker come to Rolla to give one lecture. Considerable success was experienced in this year's lecture program, the lectures all being given by faculty members and men in the Bureau of Mines and U. S. Geological Survey Stations here.

The chapter has not held its annual election of officers yet. Early in this school year the chapter elected a new treasurer due to the fact that the old treasurer did not return to school. J. K. Richardson was chosen for the task.

Under Brother Richardson's guidance the chapter has been staging an extensive drive to collect numerous old bills owed to the chapter by men who have left school prior to graduation or who have graduated. We hope to be able to wipe off a good number of these old accounts from our books.

R. A. WILLIAMS, '31

Rolla, Missouri, March 28, 1931

## KAPPA

Total number of initiates . . . . .	374
Total number of actives . . . . .	32
Number initiated this college year . . . . .	8

### ACTIVITIES

On the night of March 27, Kappa held its annual spring formal. This dance is the biggest event of our social season. With our new pledges as our guests and almost a hundred percent attendance of the active chapter, it was a most memorable occasion. The music as provided by the campus' most popular dance band and the coziness and hospitality of the beautiful Acacia house lounge served to make the affair better than ever before. Too much credit cannot be given to the committee composed of Brothers King, Logan, and Hudson, who so ably handled even the most meticulous details so necessary to the success of any formal dance.

During the School of Engineering

Open House held on March 14, many of the Kappa men played an important part. Explaining the details of many engineering projects and exhibiting various phases of engineering work was done by many of our members. We feel that this aided in some measure to make the event one of the most talked of and interesting exhibitions ever given by the University.

### PERSONALS

Kappa was fortunate to have four of its men elected to Tau Beta Pi this year. They are Brothers Chandler, Johnstone, Luckman, and Ketchum. Besides being active scholastically, these four men are participating in other campus activities. The presidency of the student chapter of the A. S. C. E. is held by Brother Ketch-

um. Brother Chandler was secretary of the same organization last semester, and this semester holds the presidency of Chi Epsilon. The editorship of the Technograph and his duties on the Engineering Council serve to keep Brother Johnstone busy. Brother Luckman has served on various committees in the Architectural School and is very popular on the campus.

In the field of campus politics Kappa has Brother Heberling. He is running for the position of representative of the engineering school on the Union Council. We are most confident that Brother Heberling will be successful. He is now junior manager of the University Interscholastic Cir-

cus and very active in many campus affairs.

Kappa is not failing in the field of military activities. Brothers Anderson and Derby have recently been pledged to Scabbard and Blade. Brother Unfried was a member of the Military Ball Committee. To him much credit is due for promoting the most successful Military Ball in the history of the university.

Brother Logan is national president of Tau Nu Tau, an engineering unit officers club. He is at present establishing chapters throughout the country.

PHIL A. ANDERSON, '32

Urbana, Illinois, March 10, 1931

## LAMBDA

Total number of initiates . . . . .	269
Number of actives . . . . .	28
Number initiated this college year . . . . .	7

Lambda Chapter at the present time has one of the largest groups of active members that has ever been in the chapter. There are twenty-eight active members enrolled. However, graduation will reduce this number considerably, as fourteen are expected to be graduated this spring. The officers for the past year have been: Edgar M. Barker, Regent; Harold R. Bradford, Vice-Regent; Donald R. Burnett, Treasurer; and Harper B. Cowles, Scribe.

The prospects for new men are very good at this time. There are four pledges now with the possibilities of several more before the year is over.

Lambda Chapter held a very successful initiation on December 14,

1930. At this time the following men were initiated: Wm. Robert Marshall, Robert H. Kirkman, John C. O'Neill, George A. Koehler, Earl Johnson, Charles Buell, and Walter Price. The initiation was followed by a banquet, at which Brother Milton Rideout acted as Toastmaster. Responses were given by several members of the University faculty and also by each new initiate. A pleasant evening was enjoyed by all. This initiation brings the total number of initiates in the chapter up to two hundred and sixty-nine.

Theta Tau is taking an active part in the activities of the Engineering Society of the University of Utah. Last year, under the guidance of Brother Walter Dauncey, the Society spon-

sored the first "Engineers Week". This consisted of an "Open House" in all the Engineering Departments for a full week's period. This year, under the leadership of Brother James Orr, a second Engineers Week is being planned. The Theta Tau members are getting back of this movement and it is expected to be a big success.

The prospects of Theta Tau men being elected to the offices of the Engineering Society for the coming year appear to be very good. The Chapter has nominated the following for office and is pushing them very hard: James M. Orr, President; William Marshall, Vice-President; Charles Buell, Secretary and Treasurer; and Eugene Merrill, Athletic Manager. We are hoping

for the best of luck for these brothers in the coming election.

The following Brothers have been elected to Epulon Eta Sigma, local honorary fraternity: Lowell E. Painter, Edgar M. Barker, Kenneth Cropper, and Harold Bradford.

Many active members of Lambda Chapter attended the Annual Fall Banquet of the Intermountain Alumni Association held in Salt Lake City, October 25, 1930. All members greatly enjoyed attending this banquet and becoming acquainted with the local alumni members.

Lambda Chapter sends its sincere best wishes to all other chapters of Theta Tau for the coming year.

HARPER B. COWLES, '31  
Salt Lake City, Utah, March 21, 1931

## MU

Number of actives . . . . .	24
Number initiated this college year . . . . .	16

With the coming of St. Patrick's Day March 17th, Theta Tau at the University of Alabama once more swings into action. The Engineering School at the University spends one of its holidays, on the birthday of the old Saint, in a series of stunts, climaxed by a banquet and dance. History has it that the old Irishman was the first to accomplish a great engineering feat by chasing the snakes out of Ireland, hence the aspiring Alabama engineers commemorate that great event by rejoicing and feasting.

In sharp contrast to usual eight o'clock classes, the pseudo St. Patrick arrives at the University sometime before noon in some unusual, unexpected

manner, accompanied, of course, by the lady of his heart. But his troubles have only started when he endeavors to locate the much beloved Blarney Stone—said to be an exact reproduction of one in the Blarney Castle, Cork, Ireland. In due time, however, with the aid of all his questionable engineering ability and with quite a few of the more common engineering implements, the elusive old stone is located, and the task rewarded with an intermission for lunch.

The afternoon is occupied by inspection trips through the various departments by the guests and ends in a banquet, with the usual speeches, roll-thriving, and what not. The social

function of the year is enjoyed during the evening by all those who have put away hob-nailed boots and corduroy trousers for the evening to "trip the light fantastic" with some of the more desirable of the female species.

Theta Tau is to take an active part in the ceremonies this year as usual. A group of initiates, suffering from the effects of the preceding night's "horseplay" will struggle about the campus bedecked in the colors, humbly saluting all the members with the hammer and tongs. The lowly neophytes will be conducted through the formal initiation in the afternoon, in plenty of time to enjoy the festivities.

At the evening banquet, as in past years, Theta Tau will present a silver loving cup to the most outstanding senior, to be selected by a representative board of the faculty and whose name is to be withheld until the banquet.

In collaboration with Tau Beta Pi, Theta Tau is securing a room in the engineering building to serve as a lounging room and regular meeting place for the comfort and convenience of members of both fraternities. And so it is with a great deal of optimism that Theta Tau continues another successful year at the University of Alabama.

We would appreciate correspondence from any other chapters of Theta Tau. Address Box 133, University, Alabama.

Mu Chapter started the second semester with all hopes and expectations of success. Nine new men were taken into the fold, namely, Albert Goodwyn, C. D. Kaiffer, William Tanner, William Soule, John Sunkel, A. A. Farrell, Francis Palme, and John

Guilmartin. All of these men are outstanding in the Engineering School.

The new officers of Mu are William Hood, Regent, Bob Fleming, Vice Regent, Alden Simpson, Scribe, and Barton Harris, Treasurer. Great strides in activities of the Engineering School are expected to be led by these men.

St. Pat's Day, March seventeenth, was celebrated here at Alabama with the usual holiday for all engineers. For the second straight year a Theta Tau man was selected to represent St. Pat; Guthrie Mabrey, also a Tau Beta Pi, was the man selected, and he filled the part well. This man of esteem was also selected as the winner of the Theta Tau trophy, which goes each year to the man in the Engineering School who is the most outstanding in every phase. The winner of this cup is picked from the senior class of the Engineering School by members of the faculty. We are very proud that another Theta Tau man received this distinguished honor.

Theta Tau is making plans to present an electric clock to adorn the hall of the Engineering School. This presentation will possibly take place during May.

Arrangements for a Theta Tau celebration at Alabama's "Great Centennial Celebration" are going forward with great strides. This festival takes place on May 9, 11 and 12, and is expected to be the greatest event in the history of the University of Alabama.

JOHN LAPSLEY, '31

ALDEN SIMPSON

University, Alabama, March 10, 1931

## NU

Total number of initiates . . . . .	191
Number of actives . . . . .	22
Number of initiates this college year . . . . .	5

Nu Chapter entered this second semester with twenty-two active members, and overflowing optimism. Our functions are now guided by the new officers who were installed at a regular meeting on March 3rd. They are: William J. Hagenlocher, Regent; Henry P. Evans, Vice-Regent; Elmer L. Jarrett, Scribe; and Stuart J. Myers, Treasurer.

Shortly before the end of the first semester, five new members, all of them juniors, were initiated. They were: Samuel J. Hyle, Henry P. Evans, Jr., George G. Richey, John M. Wege, and Albert E. Criqui. Although the number was low, they are well diversified in pursuits, representing, as they do, Electrical, Civil, Mechanical, and Chemical Engineering. We were pleased to have as our guest at the initiation and banquet, Brother Von Kaske, of Delta '24. He is with Westinghouse Electric in Pittsburgh in the research division. He favored us with a very interesting discussion and demonstration of some of the new developments in the Bakelite-Micarta field.

With our comparatively small number, we are well represented in campus activities. We boast brothers in all the upper class and student governing bodies. Holmes and Carter are in Tau Beta Pi; in Eta Kappa Nu, Carter, Smedberg, Wall and Myers; McGregor and Kinley in Pi Tau Sigma; and Kolb and Kinley in Scabbard and Blade. We engineers are recognized

even in the fine arts, for Phi Mu Alpha, musical fraternity, has pledged Jones and Morris. In Brother Jones, the Kiltie Band has a man who can, and does upon occasion, step to the fore to direct them.

The Tartan, the school newspaper, lists as editors Harry Kolb and Harry Wall, the latter contributing his excellent column. His revelations and commentaries of campus happenings are a most refreshing section and we all turn to it with pleasure, mingled with apprehension lest he has singled out some hidden skeleton in our closet. We'll wager the journalistic world will decry Harry's entrance into the field of electrical engineering.

Perhaps some of you in other chapters have met Miles A. Kinley at the College Comic conclave up in Madison, Wisconsin, during the approaching Eastertide. He will be there representing the school Puppet as its business manager.

Our new regent, we assure you, is a square shooter. As Bill is on the varsity rifle team, not even one of us can dispute it. And Brother Dodge and Evans, learned to no mean degree in mathematics, disseminate their knowledge in the capacity of instructors in this subject. Dodge and Smedberg still head the student branches of the A. S. M. E. and A. I. E. E. respectively.

Although neither Theta Tau, nor

any other professional fraternity, is represented in the intra-mural basketball leagues, many of us do play in them, and when brother meets brother, he does so with a vengeance.

With spring well in sight, plans are being formulated for another dinner dance. We hope to emulate the success of last year, and should be especially happy to welcome the alumni of Nu Chapter and other brothers now located in the Pittsburgh district.

We are losing seven of our number

this June by graduation, and intend to make our next call during the Spring Carnival. Data is not available for comparisons, but we believe we have in the semester just passed kept our high place in scholarship rating as an organization.

Nu Chapter extends fraternal greetings to all other chapters and alumni, wishing you every good fortune.

ALBERT E. CRIQUEL, '32

Pittsburgh, Pa., March 26, 1931

## OMICRON

Total number of initiates . . . . .	164
Number of actives . . . . .	34
Number initiated this college year . . . . .	12

With only eight weeks of school, Omicron Chapter steps onto the straight-4-way for the final sprint which will mark the close of a successful year during 1930-31. Among our Brothers are thirteen seniors who are making their last finish and arrangements are being made for the Farewell Dinner which is given for the seniors each year. This year it will be held on Saturday, May 23.

We are expecting to initiate six pledges sometime this spring. This will leave only six freshmen for next fall's initiation.

Many of our brothers have won individual honors during the past year. Starting off with Tau Beta Pi, Brothers Haug and Blazer were elected and raised Omicron's membership to seven at the present time. Leo Aschenbrenner was admitted to Phi Lambda Upsilon. Brother Phelps was given full charge of The Transit in the office of

General Manager. Omicron had eight other men on the staff.

The Military Department at Iowa goes rolling along and with it Omicron does its share. In the appointments of cadet officers we have one Major and three Captains in the Engineer Unit and our only Brother in the Infantry Unit was appointed Major. With the addition of Brothers Krouth and Stanley in the fall election and Brothers Aschenbrenner and Young in the spring election, Omicron has a 100% membership in Scabbard and Blade with a total of eight.

Brother Evers joined the ranks of alumni at the mid-semester exercises. Brother Stober is back in school after being out for a year and a half.

Mecca Week went over in a big way at Iowa City. Brother Claassen was chairman of the show and put on a great evening of entertainment. The play *Jowey* was the feature with



Brother Vernon taking the lead. A banquet, dance and exhibition completed a perfect week for the Iowa Engineers.

Omicron has been doing very well in fraternity athletics this year. We

leaders, ending in fourth place.

Professor F. T. Mavis was initiated as an Honorary member of Omicron this year and he also received an election to Tau Beta Pi by his school chapter at the University of Illinois.

## OMICRON



FRONT ROW—Ranzow, Rauch, Prof. Mavis, Josen, Prof. Howe, Prof. Holt, McIntyre, Hoen  
SECOND ROW—Gearheart, Tanner, Young, Krouth, Wells, Fawcett, Cerny, Haug  
THIRD ROW—Lundy, Blaser, McClarin, Wickham, L. Kehe, L. W. Smith, H. Kehe, Hamilton, Putnam  
FOURTH ROW—Miller, E. Smith, Meyers, Claxson, Starkweather, Peterson, Metz, Stanley  
BACK ROW—Clearman, Aschenbrenner, Rohwedder, Steinbrenner, Pritchett, Nunez, Phelps

succeeded in winning the Professional League Championship in basketball and were runners-up for the Grand Championship, losing a hard fought battle in the final game 14 to 12 in an overtime period. Brothers Aschenbrenner, Mullinex, Clearman, McIntyre and Stanley played steady ball throughout the season. In the "B" League we were well up among the

Two brothers have become proud fathers—Brother Edwards, '28, and Brother Fawcett, '31. Brother Metz announced his engagement after the Christmas vacation.

Omicron feels that the past year has been a successful one and we hope the other chapters can feel the same.

ART STANLEY, '31

Iowa City, Iowa, March 10, 1931

## PI

Total number of initiates . . . . .	117
Number of actives . . . . .	24
Number initiated this college year . . . . .	8

This year Pi Chapter is again sponsoring a series of lectures to be delivered by prominent engineers before the entire student body of the University of Virginia Engineering Department. The first of the series was delivered by Mr. Lee H. Williamson in November. His topic was "New

In the last communication to THE GEAR the fact that Brother D. Stafford Kelley was the treasurer of the Chapter was omitted. However, his term expired the first of March and his assistant, Brother Walter S. Gard was elected to fill the position.

The second term ushered in with ic

PI



FRONT ROW—Bliss, Hawkins, Prof. Rodman, Dean Newcomb, Thornhill, D. S. Kelley  
 SECOND ROW—Parker, Stahl, J. H. Kelley, Quarles, Bowles  
 THIRD ROW—Hancock, Gard, Allen, Ladd, Gallagher  
 BACK ROW—Alvin, Lafferty, Pollard

Fields of Engineering". A few weeks later Mr. Allen J. Saville spoke on "The Business of Engineering". The third speaker was Mr. E. E. Barnard, whose speech concerned "Engineering Registration". Brother Clarence Hawkins is making arrangements for the continuation of the series, and the fourth lecture will probably be given in April by Colonel S. B. Williamson.

Brother Jack Thurston, who left us last year for other regions. We are mighty glad he is back again.

The Theta Tau-Trigon dance really crowned all our social hopes and desires. Blue-print invitations, colored orchestra, pretty girls—all combined to set the whole University eagerly awaiting another such party.

Since the last issue of THE GEAR, Pi

Chapter has published a news letter of its own. We were delighted with the hearty welcome it received. Inasmuch as a number of alumni were thoughtful enough to write us that they enjoyed it, a second issue will soon go to press. If you can help us

to make this a more worthy edition, please send your suggestions in soon. They will all be appreciated. A new name for the letter is being sought—can you think of a good one?

RICHARD W. TALLEY

University, Va., March 26, 1951

## SIGMA

Total number of initiates . . . . .	131
Number of actives . . . . .	26
Number initiated this college year . . . . .	10

Here it is again—the beginning of another letter to THE GEAR and the beginning of another quarter of college work for the men at Sigma. We have with us this quarter twenty-six actives—ten of whom have been initiated during the past college year.

Since our last letter five more brothers have gone forth into the engineering world to try to eke out a living—they are Brothers W. R. Fiedler, R. M. Hindman, R. E. Speer, J. L. Weaver and C. V. Spangler. May they eke well! With the graduation of Brother Fiedler we again found ourselves without a regent. So our new regent is Brother William M. Webster—Brother Bill is an old-timer here at Sigma and is doing a fine job.

Oh, dear, now we come to the marriages. Three brothers have succumbed to the pleadings of Dan Cupid. They are Charles Altvater, John D. Cole and Carl V. Spangler. To these men, who have undertaken something they will never finish, we offer our heartiest congratulations.

Here are our most recent scholastic achievements: Sigma Xi — Brother George F. Leydorf; Tau Beta Pi—

Brothers Donald C. French, Charles Cancik, Robert E. Speer, Charles L. Lucal, M. P. Buck and S. R. Rudin; Eta Kappa Nu—Brothers Charles L. Lucal and Carl G. Simon. We hope that the Spring elections will give more honors to the men of Sigma.

We were honored with a visit by Brother Richard J. Russell during the Christmas vacation. Unfortunately Brother Russell came when all the boys were home for the holidays; and what made things still more complicated was that Davis, the only man in the house when Brother Russell arrived, was taking a bath. As we understand it, Brother Russell sat on the edge of the tub and the two had a heart to heart talk. We sincerely hope that Brother Russell will pay us another visit when all the boys are in school.

Here is something that should interest all the Alumni. The faculty members of Sigma presented the chapter with a beautifully designed filing cabinet for the purpose of keeping a record of the location and activities of all Alumni. This filing cabinet is a true masterpiece. So if you Alumni

will send your changes in address to the chapter house we will do our part. Here is some more information that should give the Alumni hot feet: Sigma is holding its Spring formal dinner dance on the twenty-fifth of April. Don't forget the date—we hope to see you. For the benefit of

the Ohio Alumni we have been informed that C. P. Smith, 112 Wilber Avenue, Columbus, Ohio, is the new secretary of the Ohio Alumni Association.

Well, so long—and good luck.

ROBERT C. MOSER, '31

Columbus, Ohio, April 2, 1931.

## TAU

To Theta Tau, Tau Chapter extends greetings and well wishes.

Another year is about over. Much has happened for Tau Chapter. Lec-

The Thirtieth Annual All-Engineers Banquet, sponsored by Tau, for the College of Applied Science was held March 12th at the Onondaga

## TAU



FRONT ROW—Hinchcliffe, Brown, Hodden, MacAlpine, Prof. Asheson, Hannum, Henderson, Sobieralski, Wink, Collins, Bird

MIDDLE ROW—Bibbini, Peters, Fowler, Bull, Backman, Reed, Seigel, Patterson, Carroll, Mann

BACK ROW—Heller, Traver, McKenna, Neubert, Moulton, Pfaffhausen, Frank, Digney, Knapp, Williams, Blouet

tures by various members of the faculty and the chapter, smokers and social meetings and business meetings have made up a varied program that allowed of no monotony.

Hotel. The affair was remarkably well attended by both students and alumni, speaking well for the efforts of the committee in charge. Brother Wood, '30, was back for a good feed.

The doldrum-like period that follows the banquet was heightened on March 19th by a visit from Brother Fred Coffman, Grand Vice-Regent. We were glad to have him with us and hope to have him back for a longer visit.

Future plans have not been laid by the Chapter although there is considerable feeling for more activity in the college. In all probability the next year will see Tau sponsoring new events and occasions for the engineers of the university.

Tau Chapter has elected the following officers for the coming year: Regent, Joseph Carroll; Vice-Regent, Leo Q. Frank; Treasurer, Burton Fowler; Secretary, Edward Backman.

The following men have achieved

scholastic honors: Tau Beta Pi—Walter E. Moulton, '31, Harry Williams, '31, Arnold Pfaffhausen, '31, Earl Auyer, '31, Tilroe Hedden, '31, Frank Heller, '31, Donald Bibbens, '31, Edward Backman, '32, Malcolm Reed, '32; Pi Mu Epsilon—Walter Moulton, '31, Earl Auyer, '31, Arnold Pfaffhausen, '31, Donald Bibbens, '31, Tilroe Hedden, '31, Edward Backman, '32, Joseph Carroll, '32, Malcolm Reed, '32; Phi Kappa Phi—Tilroe Hedden, '31, Earl Auyer, '31.

Trusting that the other chapters have been as fortunate as Tau during the last year, Tau wishes you success for the coming year.

D. M. MACALPINE.

Syracuse, New York.

## PHI

Total number of initiates . . . . .	87
Number of actives . . . . .	32
Number initiated this college year . . . . .	18

Greetings! Brothers in Theta Tau! Again we meet through the pages of THE GEAR to relate to each other the activities of our various chapters.

The initiation of Brother P. S. Stephenson last October brought our total initiates to eighty-seven with twenty-nine actives in the house at the present time. Brother Stephenson, an alumni initiate, has been the only initiate since the fall issue of THE GEAR. Our scholastic requirement for initiation has prevented several of our pledges from becoming members. There are at present six men pledged to Phi Chapter.

The following men were elected this month to direct the Chapter through

the coming college year: R. M. Adkins, Regent; F. G. Zwinger, Vice-regent; W. C. Osha, Scribe; W. J. Neuhauser, Treasurer; H. E. Antele, Steward; D. R. Ward, House Manager.

Brother Gordon Guinnup has been very ill since last summer and has not been able to attend the University; however, he is able to be around now. Brother Marshall Chandler met with a serious foot injury last November while hunting, and has been forced to drop out of school for the remainder of this year.

Basketball and volley ball have been the two major activities of the Chapter this winter. We have been very lucky in volley ball and have hopes of

winning the inter-fraternity meet.

The scramble for jobs on the part of the Seniors is perhaps more noticeable this year than before with fifteen men leaving the house this June. The house will be rather empty next September until more pledges can be se-

cured.

Any word from our alumni will be greatly appreciated as we have heard from very few during the winter.

ROBERT E. STRADLING, '31

West Lafayette, Ind., March 21, 1931

## CHI

Total number of initiates . . . . .	44
Number of actives . . . . .	21
Number initiated this college year . . . . .	19

We have at present twenty-five active members who are registered for university work. The following men were initiated on December 17, 1930:

Thorton Phillips . . . . .	Electrical
Walter A. Brown . . . . .	Civil
Lin D. Barry . . . . .	Mining
Henry Clark . . . . .	Mining
J. Montgomery . . . . .	Civil
Mark Clardy . . . . .	Mining
Leon Magee . . . . .	Civil
Robert Houston . . . . .	Civil
John Dritt . . . . .	Civil
Delmar Fisher . . . . .	Mechanical
Walter Waidler . . . . .	Mining

The initiation was followed by a banquet at the Commons, with Dean Butler acting in the capacity of toastmaster. An address of welcome was given by Weldon Brinton and the response was given by Lin Barry. A short talk was given by Otto Mangum entitled, "You Are Theta Taus Now". It was then time for us initiates to give perfect examples of backwardness.

Chi Chapter has recently pledged eight men to Theta Tau. The new men to be initiated are:

Gordon M. Butler, Jr., Tucson, Ariz.

Edward Fraps, Tucson, Ariz.

George Houston, Tucson, Ariz.

William Norton, Miami, Ariz.

Edward Novelle, Monrovia, Cal.

G. Clason, Bisbee, Ariz.

S. A. Young, El Paso, Texas.

F. D. Angeny, Phoenix, Ariz.

Officers for the coming year, who were recently elected, are:

Peter Kiernan . . . . . Regent

Frank Lowe . . . . . Vice-Regent

Walter A. Brown . . . . . Scribe

Leon Magee . . . . . Treasurer

Lin D. Brown . . . . . Corresponding Sec'y

Barry had the misfortune of becoming sick and he subsequently withdrew from college. We hope that "Miner" Barry's depression does not have the same duration as the present depression in the price of metals, and that we will have him with us again next fall.

Chi Chapter is losing the following men by graduation:

Frank Bacon . . . . . Mining

Herschel McMullen . . . . . Civil

George Peters . . . . .	Mining
Earl Bennett . . . . .	Civil
Mark Clardy . . . . .	Mining
Jacob Erickson . . . . .	Civil
Leo Laine . . . . .	Civil
Otto Mangum . . . . .	Electrical
Weldon Brinton . . . . .	Electrical
Robert Houston . . . . .	Civil
Elton Dail . . . . .	Civil

Of this group Bennett, Clardy, Erickson, Laine, Mangum, Brinton and Dail are members of Tau Beta Pi. All are members of the A. A. E., and of the societies of their respective colleges. Mark Clardy is also a member of the A. I. M. M. E. These men have been strong supporters of Theta Tau while active members and we are sure of their success as alumni as well, for we know that they will keep in constant touch with the chapter. Four of the officers of last year are in the group: Erickson was Regent, Mangum was Vice-Regent, Laine was Scribe, and McMullen was Treasurer. Frank Bacon is president of the Miners Society for the school year of 1930-31, and George Peters is president of the student chapter of the A. A. E. for the same period. While the others have been exerting themselves with school activities, little Robert Houston has been quietly designing a new power plant building, workshops and accessories, to be erected in the near future.

We have two men who played on the greatest football team Arizona has had in years. These men are Earl Bennett, who played his last year at end, and Delos Gardner, who won his first letter at guard. "Benney" has played wonderful football all through his college years and he has upset the

"dope" in that he is a member of Tau Beta Pi. Delos has one more year and, of course, another letter. Delos is also a member of Tau Beta Pi, making another upset.

Carl Bruce, a junior civil, withdrew from college shortly after the opening of the second semester to join the Army Air Service. From a letter it seems that he would have been better off if he had joined the Infantry. We



CARL BRUCE

feel sure that the Army has some planes somewhere and that Carl will soon solo. Carl is stationed at March Field, Riverside, California. We are including a picture showing what the well-dressed aviator will wear.

William Tremaine is now at Lake Placid, New York. He may be reached by writing to 43 Bayberry Street, Bronxville, New York.

Elton Dail has made Phi Kappa Phi, the honorary scholastic fraternity on the campus.

Walter A. Brown is now an initiate of Tau Beta Pi.

We have had two very interesting talks during the school year. Professor Smith of the Law College gave a talk on the humorous side of law as

he saw it, and as a result there were several minds with but a single thought. Robert E. S. Hienaman, an alumni member with the Arizona Bureau of Mines, told of the functions of the bureau, of his part in the bureau, and of the letters received from the typical prospectors.

Owing to the youth of Chi Chapter our alumni have not advanced to the point of high positions, marriages, etc. Some of the alumni have written some very fine letters which we have enjoyed very much.

WALTER C. WAIDLER, '32

Tucson, Ariz., March 25, 1931

## Recent Initiates

### ALPHA

- 285 FIRMIN, C. F., Findlay, O.
- 286 RODMAN, FRANK, Cleveland, O.
- 287 KLIPPERT, D. S., Warren, O.
- 288 HAAS, R. E., Decatur, Ill.
- 289 GRAY, G. N., Lakewood, O.
- 290 SIMON, R. W., Sandusky, O.
- 291 HANNUM, C. M., Cleveland Heights, O.
- 292 BAKER, H. D., Jr., Cleveland Heights, O.
- 293 ERICSON, R. E., Gates Mills, O.
- 294 LESLIE, D. D., Dunkirk, O.
- 295 BARD, J. H., Lakewood, O.
- 296 McMILLAN, M. W., Granger, O.
- 297 GLAENAPP, A. H., Cleveland, O.
- 298 KIRKSTADT, H. J., Cleveland, O.
- 299 FELL, H. C., Youngstown, O.
- 300 WEBBER, F. A., Cleveland, O.
- 301 DEMPSEY, D. F., Cleveland, O.
- 302 BARTH, J. A., Lakewood, O.

- 351 FINCH, EDWARD HAROLD
- 352 SKOVOLT, JOSEPH WILLIAM
- 353 HUTCHINGS, ALLAN ARTHUR

### BETA

- 343 AUGST, ROBERT ARTHUR, JR.

### GAMMA

- 373 NYE, HERBERT REUBEN, Golden, Colo.
- 374 AUSTIN, ARTHUR BRADFORD, Golden, Colo.
- 375 HOVEY, LEWIS ALLYNE, Golden, Colo.

- 376 SNOW, GAYLORD RICHARD, Golden, Colo.

- 377 MARSHALL, JOHN GILBERT, Golden, Colo.

- 378 LINDEMAN, FRANK JR., Golden, Colo.

### THETA

- 162 CLIFFORD, GEOFFREY EDWARD, Manhattan, L. I.

- 163 GRANT, FOREST, JR., East Orange, N. J.

- 164 HEFFELFINGER, HEATON BENNET, New York City.

- 165 JENKINS, GEORGE FREDERIC, New York City.

- 166 KIRKLAND, CLAUDE JAMES, JR., Leonia, N. J.

- 167 KNIFFIN, LLOYD FAIRHURST, Frito, N. Mex.

- 168 MASON, CHARLES JOHN, New Hampton, N. Y.

### IOTA

- 259 MONROE, REX, Edwardsville, Ill.

- 260 MAKIN, WM. H., JR., Point Pleasant Beach, N. J.

- 261 WILLIAMS, A. J., Granite City, Ill.

- 262 KIRKPATRICK, R. L., Crainesville, Texas.

- 263 FREWER, J. F., St. Louis, Mo.

### KAPPA

- 374 TIFFANY, J. B., JR., Kansas City, Mo.



## LAMBDA

- 263 MARSHALL, WM. R., Salt Lake City, Utah.  
 264 PRICE, WALTER, Salt Lake City, Utah.  
 265 O'NEILL, JOHN C., Salt Lake City, Utah.  
 266 KOEHLER, GEORGE A., Salt Lake City, Utah.  
 267 BUELL, CHARLES, Salt Lake City, Utah.  
 268 KIRKMAN, ROBERT H., Salt Lake City, Utah.  
 269 JOHNSON, EARL S., Salt Lake City, Utah.

## NU

- 187 RICHEY, GEORGE G., Homestead, Pa.  
 188 WIGE, J. MILTON, Titusville, Pa.  
 189 EVANS, HENRY P., JR., Pittsburgh, Pa.  
 190 CRIZQUI, ALBERT E., Buffalo, N. Y.  
 191 HYLE, SAMUEL J., Duncansville, Pa.

## PI

- 110 GARRETT, BEN H., Richmond, Va.  
 111 BOWLES, J. W., Roanoke, Va.  
 112 KELLEY, JOS. H., Charlottesville, Va.  
 113 BENZON, WM., Calonsville, Md.  
 114 GALLAGHER, PHILIP A., Portsmouth, Va.  
 115 GARD, WALTER, Chevy Chase, Md.  
 116 HANCOCK, J. B., Richmond, Va.  
 117 ALLEN, FRANCIS L., Fairfield, Va.

## SIGMA

- 130 BARBER, FREDERICK OTIS, Paulding, Ohio.  
 131 HAGEMAN, MARION FRANCH, Sidney, Ohio.  
 132 BARNES, STANLEY HUBERT, Port Clinton, Ohio.

- 133 WOLF, CLARENCE EARL, Londonville, Ohio.  
 134 MOYER, GEORGE WILSON, Delaware, Ohio.  
 135 DAVIDSON, WILLIAM CLARKE, Columbus, Ohio.

## TAU

- 90 DIGNEY, KENNETH A., Syracuse, N. Y.  
 91 MOULTON, WALTER E., Beechert, N. Y.  
 92 SEIGEL, WAYNE A., Syracuse, N. Y.  
 93 WILLIAMS, HARRY C., Syracuse, N. Y.  
 94 BACKMAN, JOHN EDWARD, Sea Isle City, N. J.  
 95 BULL, HARRY W., Syracuse, N. Y.  
 96 FOWLER, BURTON COLLINS, Syracuse, N. Y.  
 97 PETERS, OTTO HENRY, Syracuse, N. Y.  
 98 REED, MALCOLM H., Baldwinsville, N. Y.  
 99 ROWLEY, ALLEN B., Syracuse, N. Y.  
 100 TOMPKINS, HERBERT W., Syracuse, N. Y.

## CHI

- 10 HOUSTON, ROBERT, Tucson, Arizona.  
 35 DRETT, JOHN, Mexico, D. F.  
 36 MAGEE, LEON, Tucson, Ariz.  
 37 CLARDY, MARK, Sacaton, Ariz.  
 38 BROWN, W. A., Covina, Calif.  
 39 BARRY, LIN D., Nacozari, Sonora, Mexico.  
 40 CLARK, HENRY, Covina, Calif.  
 41 WADLER, WALTER, Tucson, Ariz.  
 42 FISHER, DELMAR, Phoenix, Ariz.  
 43 PHILLIPS, THORNTON, Miami, Ariz.  
 44 MONTGOMERY, J. W., Williams, Ariz.

# Alumni Notes

## ALPHA

- A. D. ALDERSON, '29, is employed with the Soo Line Railroad and has been living at the chapter house.
- J. A. BANOVITZ, '21, is with the Foley Construction Company. His present address is Colstrip, Montana.
- CARL BARTHELEMY, '28, is now with the Northern States Power Company as Plant Result Engineer. He is located at the Minnesota Valley Plant at Granite Falls, Minnesota.
- ALVAH E. BROCKWAY, '09, can be addressed Route 1, Box 18, Medford, Oregon.
- CURTIS E. CRIPPEN, '30, is in Minneapolis in the Milwaukee Railroad office.
- BENJAMIN J. CURTIS, '13, is now with the Chicago Subway Commission. Previously he was with the Sanitary District of Chicago.
- KENNETH DUNCAN, '10, who has been Superintendent of the Dunwoody Mine at Chisholm, Minnesota, for Pickands Mather and Company, has been promoted to Superintendent of the Palm-Arville and Plymouth Mines on the Gogebic Range, Michigan for the same company.
- GEORGE A. DU TOIT, '10, is Purchasing Agent for the Minneapolis Heat Regulator Company.
- PIERCE P. FURBER, '08, is at 112 North Broad Street, Philadelphia.
- RALPH L. GOUTZENBERGER, '13, is Manager of the Industrial Department of the Minneapolis Honeywell Company in Minneapolis, Minnesota.
- OLIVER S. HAGERMANN, '18, is not in Chicago but still with American Light and Traction Company, and lives at 1802 Cherry Street, Winnetka, Illinois.
- WILLIAM C. HILDEBRICK, '26, is with Western Union Telegraph Company in New Orleans, Louisiana.
- W. L. HINDERMAN, '29, has been living at the chapter house. He is with the State Highway Department's Experimental Station.
- N. D. KEAN, '24, is engineer at the Bennett Mine of Pickands Mather Company at Keewatin, Minnesota.
- RAYMOND W. KELLER, '25, has been transferred from the securities to the illuminating engineering department of the Ohio Edison Company. He was placed in charge of the Springfield division of this department about September 1st. The work involves both sales and engineering.
- DONALD B. KENDALL, '30, is with the Electric Machine Manufacturing Company at Minneapolis, Minnesota.
- GEORGE LANGENBERG, '30, is married to Miss Irene Matson. Brother Langenberg is employed by General Electric Company at Fort Wayne, Indiana.
- PHIL J. LAURENCE, '15, is now at 640 Navarre Avenue, Coral Gables, Florida.
- JOSEPH P. LUSHENE, '25, is still with the U. S. Geodetic and Coast Survey. His address is Box 2625, Ft. Myers, Florida.

JOHN C. MARCROFT, '27, is now Assistant Hydraulic Engineer in the U. S. Engineers Office, Sacramento, California.

L. A. MEARS, '29, is with the KSTP Radio Station in St. Paul.

M. F. QUINN, '12, is temporarily at San Juan de Letran No. 3, Mexico City, D. F., Mexico.

LARCOM RANDALL, ex '18, is in Hingham, Massachusetts. He lives on East Street.

ERNEST W. SEEMAN, '20, formerly in Duluth, is now structural engineer with the Portland Cement Association in Minneapolis, Minnesota.

CHARLES J. SKAROLIS, '24, is now Wire Chief for the Bell Telephone Company in Fargo, North Dakota.

KARL SOMMERMEYER, '30, is at Milwaukee at the expense of Cutler-Hammer and Company, Incorporated. He has been recently transferred from the experimental department to the test floor.

HUGH A. SMITH, '18, is with the Longview Public Service Company in Longview, Washington.

GEORGE SNOODGRASS, '30, has recently announced his marriage to Miss Gertrude Risch of St. Paul. Brother Snodgrass is employed in the Engineering Office of the War Department in St. Louis, Missouri.

F. C. TESKE, '27, completed his graduate work for a Master Degree at Yale University under the Lord Strathcona Scholarship in Transportation.

GEORGE THWING, '28, is working as an estimator for the Winston Brothers in St. Louis, Missouri. Brother Thwing is the proud father of an eight months old baby endowed with his dad's good-naturedness.

DONALD M. WESBROOK, '10, is Treasurer of Westberg and Childs, Inc., at Pine and Fifth Street, Seattle, Washington.

E. J. WITT, '27, is married and is now employed with the Concrete Steel Company of St. Paul.

E. F. YOUNG, '26, is also married. He is employed with the Concrete Steel Company of St. Paul.

## BETA

GERALD M. BARTON, '26, can be addressed 510 Close Building, Toledo, Ohio.

RAYMOND A. CASE, '12, is with the International Smelting Company at Tooele, Utah.

JOSEPH DAVIS, '13, is with the Walker Mining Company at Spring Garden, California.

A. L. FERRIN, '11, is now in Morenci, Arizona.

W. CARLTON FREDERICKS, '25, is with the Standard Oil Company at Duluth, Minnesota.

DURAND A. HALL, ex '14, is in Tryon, North Carolina.

ENOCH HENDERSON, Beta '05, has been appointed Supt. of the Noranda Mines at Rouyn, Quebec, Canada.

WILLIAM L. HUGHES, ex '13, can be addressed at 2645 Dartmoor Road, Cleveland, Ohio.

ARTHUR B. KENDALL, '17, is with the Woodward Iron Company at Woodward, Alabama.

GEORGE A. KRUMM, '24, is at 1232 Montana Street, Chicago, Illinois.

MARSENA R. KIRKPATRICK, '07, can be addressed in care of B. F. Smith and Company, 79 Milk Street, Boston, Massachusetts.

CHARLES F. MOORE, '27, is with the Petroleum Iron Works Company at Sharon, Ohio.

IRA P. NICOLE can be addressed in care of W. S. Prondifit, O'Brien Road, Grand Rapids, Michigan.

BENJAMIN H. McLACHLAN, '11, is with the McLachlan Building Material Company, 201 Cottage Grove Avenue, Chicago, Illinois.

RADNOR J. PAQUETTE, '27, has changed his mailing address to P. O. Box 194, Lake Linden, Michigan.

PAUL H. WILKINSON, '05, is at 3700 Santa Fe Avenue, Los Angeles, California.

## GAMMA

E. VAN HORN BAUSERMAN, '25 is engaged in Petroleum Engineering with the U. S. Bureau of Mines, 308 Federal Building, Dallas, Texas.

KENNETH BOWIE, '30, was married last spring to Miss Ruth Taylor of Hay Springs, Nebraska.

GEORGE E. BRETSCHNEIDER, '28, is with the Stanolind Oil Co.

ROBERT BRUMMETT, '26, is with the engineering department of the City of Los Angeles, California.

J. J. BURN, '16, is Mill Superintendent for St. Joe Lead Company, and has been moved to Leadwood, Missouri, from Bonne Terre.

FLOYD CARR, '30, is with the Sinclair Oil & Gas Company, at Seminole, Oklahoma. His Post Office box is No. 877.

THOMAS J. CLIFFORD, '21, with the St. Joe Lead Company, has returned to Rivermines, Missouri.

LAWTON CONGER, '30, is living at 1609 Shenandoah, Toledo, Ohio.

RONALD COULTER, '19, is with the Petty Boiler Works at Lebanon, Pennsylvania.

FRANK E. DELAHUNTY, '23, is Assistant Superintendent of La Porte Mines, Inc., at La Porte, California.

JOHN H. EAST, JR., '10, is manager of the U. S. Gypsum Company at Albaster, Michigan.

HARRY M. FISKE, '21, can be addressed in care of Ingersoll Rand Company, 1460 East Fourth Street, Los Angeles, California.

L. C. FOPEANO, '21, is now with the Nichols Copper Company at El Paso, Texas.

DONALD I. GAFFAGAN, '27, is geologist for the George F. Getty Oil Company, Box 988, Carlsbad, New Mexico.

JOHN K. HOUSELLS, '22, is at Pismo Beach, California.

NORBERT W. HYLAND, '22, is residing at 2374 Hudson Street, Denver, Colorado.

WILLIAM KING, '28, announces the birth of a daughter at Mariposa, California, where he is superintendent of a mine.

FREDERIC KINLEY, '27, has been made Assistant Manager for the Ingersoll Rand Company at Calcutta, India.

PHILIP J. MCGUIRE, '15, who is with the Oliver United Filters, has been moved to the San Francisco office and is living at 651 Neilson Avenue, Berkeley, California.

- E. R. LOCKE, '28, is now with Ingersoll Rand Company at Houston, Texas.
- MARVIN MARSH, '29, announces the birth of a son at Middletown, Ohio. He is with American Rolling Mills Company.
- E. M. MARSHALL, '11, who is superintendent of the plants of the Stockton Firebrick Company at Stockton and Pittsburg, California, is now living in Walnut Creek, California.
- V. L. MATYSON, '28, mining engineer for Norroe & Tower, is now located at Burnsville, North Carolina.
- FRED M. NELSON, '21, announces the birth of a son, Fred M. Nelson Jr. on February 9, 1931. Brother Nelson is with the Texas Gulf Sulphur Company at Newgulf, Texas.
- REAMER PATTEN, '30, is with the Texas Production Company at Hamilton, Colorado.
- JAMES W. PEARCE, '14, engineer for the City of Chicago, now lives at 1357 East 47th Place, Chicago, Illinois.
- DOUGLAS SHAW, '28, was recently married to Miss Caroline W. Clark at San Diego, California.
- LATHAM C. SQUIRE, '22, is Vice President of Technical Advisory Corporation, 11 Park Row, New York City. He resides at 440 W. 34th Street, New York City.
- J. R. SHANLEY, '11, is at 4925 East Broadway, Long Beach, California.
- CHARLES H. STEWART, '25, is Petroleum Geologist with Warner Quinlan Company of Texas, 1409 Post Dispatch Building, Houston, Texas. He resides at 2907 Truxillo Avenue, Houston, Texas.
- CHARLES E. STOTT, '25, was married on December 12, 1930, to Miss Ethel McKnight in El Paso where they are making their home at the Willard Apartments.
- E. M. TIFFANY, '24, is now with the London Gold Mines Company at Alma, Colorado.
- WILLIAM D. WEIMAR, '21, is in the Plant Department of the Southern California Telephone Company in Los Angeles. His mailing address is 675 South Coronado Street, Los Angeles, California.
- C. A. WEINTZ, '27, is the father of a daughter, Patricia Ellen, born October 6th at Livingston, Montana, where he is geologist for the Midwest Refining Company.
- JOHN R. WEST, '10, is at 733 Bush Street, San Diego, California.
- WILLIAM M. LEWIS, '09 ex Alpha, one of the four founders of Theta Tau, is still with the Layne-New York Company in Camden, New Jersey. He was in Minneapolis last summer and called on Alpha but all the activities were absent at the time of his visit.

## DELTA

- G. M. COVER, '24, who was formerly with the Weirton Steel Company at Weirton, Ohio, is now instructor in Metallurgy at Case.
- DONALD V. HAMPTON, ex '23, has an office at 2010 East 102nd Street, Cleveland, Ohio.

CLARENCE A. DAUBER, '26, is at 1511 East 71st Street, Cleveland, Ohio. W. E. SLABAUGH, '29, after receiving his M.S. at M. I. T., is now instructor in Mechanical Engineering at Case and recently addressed Delta Chapter on graduate work at the Massachusetts Institute of Technology.

DR. FRANK R. VAN HORN, Hun. '92, was one of the delegates who installed a chapter of Sigma Xi at the

University of Pittsburgh recently. While in Pittsburgh he addressed a meeting of Case alumni on "Diamond and Gold Mines in South Africa". A. K. Walton, '20, J. S. Applegate, '11, J. M. Byrns, '27 and W. V. Greeley, '29, also attended. Later Dr. Van Horn gave a similar lecture in Detroit where he met Brothers O. Z. Klopsch, '22, W. F. Clancy, '21, and R. J. Wilcox, '23.

## EPSILON

BILL CORY, '29, recently visited Epsilon Chapter and spoke on the Paleontology and Geology of the Vaqueros and Temblor formations of the Lower Miocene of California.

DAN M. DUNCAN, '18, can be located at 824 Maine Avenue, Long Beach, California.

SYDNEY E. FRASER, '18, lives at 44 Berkeley Way, Santa Cruz, California.

JOHN G. FEELEY, '13, is at 2012 Gaither Street, Selma, California.

FRANK S. HUDSON, '11, has moved with his family to be with the Steel Company at The Hague in Holland. His address is c/o Bat-aafsche Petroleum Maatschappij, Carel van Bylandtlaan 30, The Hague, Holland.

C. R. KING, '22, research chemist for the United Verde Copper Company is in Canada doing consulting work for the Hudson Bay Mining and Smelting Company.

ORLANDO G. McDONALD, '24, is in Detroit, Michigan. His address is 2917 Hagarth Street.

WILLIAM B. MILLER, '16, is living at 45th and Ocean Drive, Manhattan Beach, California.

RALPH T. SALISBURY, '21, can be found at 179 Vernon Terrace, Oakland, California.

WALTER H. SCHROEDER, '11, is at 317 South Burlingame Avenue, Brentwood Heights, Los Angeles, California.

EDWARD C. SIMPSON, '21, can be addressed at 1757 Oxford Street, Berkeley, California.

ARLO M. SPERRY, '18, was married December 8, 1930 to Miss Hazel Goodrich of Covina, California.

DR. GEORGE D. LOUDERBACK, '98, who is the head of the geology department at the University of California, is now also Dean of the College of Letters and Science.

## ZETA

AMSFORD GALBREATH, '31, is with the State Highway Dept. at Topeka, Kan.

E. F. KINDSVATER, '23, is now with the Phillips Pipe Line Company at Bartlesville, Oklahoma. He writes that P. S. ENDACOTT, '23, S. S. LEARNED, JR., '24, GEORGE R. BENTA, '25, T. M. HIPPO, '26, C. W. HUBBELL, '26, J. R. SYAGG, '24, D. A. MCGEE, '26, and D. W. AULD, '30, are all with the Phillips Pipe at Bartlesville.

MARVIN HENSLEY, '30, is with the A. T. & T. Co. in Kansas City, Mo.

ROBERT GERO, '30, is with a consulting engineering firm in Anacortes, Washington.

HOWARD HINES, '30, is with the Empire Oil Company at Higgins, Texas.

ELMER RUSH, '29, is employed with the A. T. & T. Co. in Kansas City, Mo.

LEWIS TUCKER, '30, is with the Creole Oil Co. in Trinidad, British West Indies.

## ETA

GILBERT J. ACKERMAN, '28, is in the Engineering Department of the Luckenbach Steamship Company, Foot 35th Street, Brooklyn, New York.

WILLIAM J. FARTHING, '16, is with Houston Properties Corporation, 10 East 40th Street, New York.

ROCKWELL HEREFORD, '24, writes that he is now in the investment banking game. After graduation he spent one year with the Southern California Edison Company in construction work on dams and tunnels and then joined the organization which has become the present Security-First National Company. His particular field is the buying and statistical departments. His address is 100 Palmette Drive, Pasadena, California.

ROBERT R. HARPER, '13, can be addressed at 3821 Woods Drive, Des Moines, Iowa.

NORWOOD P. JOHNSTON, '21, is at 1081 Shady Avenue, Pittsburgh, Pennsylvania.

W. W. YOUNG, '29, is at 9 East 38th Street, New York.

OTTOMAR O'DONNELL, '13, is with the American Gas Products Corporation. His address is 822 Exchange Building, Denver, Colorado.

ROBERT W. ROGERS, '26, is now working with the Foster-Wheeler Corporation at 161 Broadway, New York.

LYALL L. STUART, '21, is Syndicate Manager "1073 Fifth Avenue Corporation", Fuller Building, New York.

WINTHROP C. SWAIN, '17, can be addressed at 35 Nassau Street, New York.

THOMAS S. WOOD, JR., '28, is with the Corning Glass Works, Corning, New York.

## THETA

CHARLES M. BRINKERHOFF, '25, announces the birth of a daughter, Carol, born January 13, 1931.

ROBERT B. DICKSON, '29, was married on October 4, 1930, to Miss Priscilla Foote of New York City.

IRVING W. HADSELL, '14, can be addressed in care of F. W. Dodge Company, 119 West 40, New York City.

DANIEL E. HARNETT, '25, announces the birth of a daughter but has not sent date or name.

GORDON C. MACVEAN, '23, was married to Miss Cecelia M. Gavin in New York on February 3, 1931.

JOHN CRAWFORD, '22, is at 12 Woodland Road, Maplewood, New Jersey.

MARTIN H. OLSAD, '27, is at 151 Tremont Avenue, Kenmore, New York.

NORMAN J. PORSKE, '26, is now at 1934 Delaware Place, Brooklyn, New York.

WILLIAM B. SOMMERVILLE, JR., '17, can be addressed at 403 West 111, New York City.

## IOTA

J. E. BARTON, '30, is with the Bridge Department of the Missouri State Highway Department at Jefferson City, Missouri.

J. H. BRICKNER, '30, has recently resigned his position with the Illinois State Highway Department to go into the contracting business in Tulsa. Brickner's address is Acme Construction Co., Box 106, Tulsa, Oklahoma.

T. J. DOVER, '30, is employed by the General Cable Corporation. Dover lives at Metuchen, New Jersey.

JOHN W. FLEMMING, '25, can be addressed at 701 Cotton States Building, Nashville, Tennessee.

JOHN P. GORDON, JR., '22, is with H. L. Doherty and Company, W. T. Waggoner Building, Ft. Worth, Texas.

E. J. GREGORY, '30, is at present in Erie, Pennsylvania. Gregory is working with the Bucyrus-Erie Company of Milwaukee.

K. F. HASSELMANN, '25, was married to Miss Marjory Nelle Meyer at Lake Placid, New York on December 25, 1930. Hasselmann resides at Potsdamer, Private Street 121C, Berlin, Germany.

A. P. HEISER, '30, is employed by the Kansas City Power and Light Company at Kansas City.

J. B. HUERNER, '30, has accepted a position with the U. S. Engineers at Memphis, Tennessee.

J. R. JARBOE, '30, was married to Miss Mildred Maguire at Fort Scott, Kansas on November 6, 1930. Jarboe is Assistant County Engineer of Labette County, Kansas, and resides at Oswego, Kansas.

NED O. KRAFT, '27, recently returned to Rolla to deliver a lecture to the Freshman Class on "Aluminum and Its Alloys as Materials of Construction". Kraft is with the Sales Department of the Aluminum Company of America.



- T. H. KENNEDY, '27, is doing metallurgical research work for the Russian Government at Kamenskoe, U. S. S. R.
- E. C. LONG, '30, is with the St. Louis Smelting and Refining Company at Rico, Colorado.
- WILLIAM B. MACHIN, '28, is with the Indiana Road Paving Company at Alexandria, Indiana.
- D. L. MOODIE, '24, was married to Miss Artie Tulloch Walters of St. Louis on February 20, 1931. Moodie is associated with the A. K. Howell Company, a member of the Syndicate Trust Company of St. Louis.
- WILLIAM J. NOLTE, '19, is at Wichita Falls, Texas, with the Marland Oil Company of Texas.
- C. F. PAGE, '31, is working at the Bureau of Mines in Rolla.
- G. R. SCOTT, '24, is the proud father of a new daughter born February 2, 1931. Scott is with Black and Veatch, Civil Engineers, of Kansas City, and resides at 407 West 60th Street Terrace.
- HAROLD H. SHORE, '22, is at the New Holland Hotel, Orange, Texas.
- DANA W. SMITH, ex '29, resides at 22 Westwood Road, New Haven, Connecticut.
- M. F. THOMAS, '30, is a Fellow at the Bureau of Mines Station at the University of Alabama.
- Dr. W. D. TURNER, Hon., is on the faculty of Columbia University in New York. Dr. Turner also maintains an office downtown as a consulting chemist.
- N. S. WILLIAMS, '29, is the father of a daughter born on January 11, 1931. Williams is employed in St. Louis.
- CLAUDE N. VALERIUS, '25, has moved from 809 Central Building, Wichita, Kansas, to 818 Ritz Building, Tulsa, Oklahoma.
- E. R. CUSHING, '27, is with the Illinois Highway Department at Carbondale, Illinois.
- LOUIS W. EHLERS, '17, is with the Shell Petroleum Corporation in St. Louis, Missouri. He lives at 417 Tiffin Avenue, Ferguson, Missouri.
- HERMAN MUTZ, '21, is Assistant Superintendent of Mines for the International Nickel Company at Copper Cliff, Ontario.

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## KAPPA

- J. D. JARVIS, '29, who has just returned from a year's study in Europe, was welcomed back by Kappa Chapter. Even though he is an alumnus he participates regularly in all the undertakings of the local chapter.
- HAROLD M. MADSEN, '27, was married recently.
- LEONARD WHITE, '21, married Miss Gladys Stanward June 20, 1929. They live at 1906 Main Street, Little Rock, Arkansas, where Leonard is a consulting engineer with Dickinson and White, Inc.
- Kappa is most fortunate in having four very active alumni in the persons of PROFESSOR DOLAND, Pro-

FEESOR PUTMAN, PROFESSOR VAWTER, and T. J. DOLAN. Much of the success of this chapter is due to their regular attendance at all our

meetings, giving helpful suggestions and prompting various discussions which serve to make our meetings most worth while.

## LAMBDA

GEORGE W. DAUNCEY, '30, is in the engineering department of the General Electric Company at Schenectady, New York.

BYRON G. JONES, '30, is with the Worthington Pump and Machinery Company, of Cincinnati, Ohio.

RICHARD V. JONES, '29, is in Denver with the American Telephone and Telegraph Company.

G. S. LAMBERT, '19, is with Phillips Pipe at Bartlesville, Okla.

REES W. DAVIS, '19, is at Island Falls, Saskatchewan, Canada.

## MU

GUY M. COLE, '24, is in Atlanta, Georgia. His address is Apartment 2-4, 4875 Piedmont Avenue.

WILLIAM E. HAMILTON, '23, is with the Tennessee Coal and Iron Company, at Birmingham, Alabama.

RESE E. MALLETTE, '22, is at 226 Druid Oaks, Birmingham, Alabama.

GEORGE H. NASON, '23, can be addressed at 1025 South 23rd Street, Birmingham, Alabama.

HUGH D. PALLINTER, Hon. '06, is with the Mechanical Development Company, 71st Euclid Building, Cleveland, Ohio. He resides at 3754 Independence Road, Cleveland, Ohio.

JOHN W. PEERSON, '26, is at 510 Walnut Street, Florence, Alabama.

JOHN J. SHANNON, JR., '25, is at 2303 Ridge Avenue, Evanston, Illinois.

## NU

BENNY AULD, '30, now with the Bureau of Mines in Pittsburgh, is a frequent visitor to Nu Chapter.

ELBERT A. BAUGH, '23, can be addressed at 713 Construction Building, Dallas, Texas.

CHARLES W. JEFFERS, JR., '23, is with

the Ford Collieries Company at Curtisville, Pennsylvania.

EDWIN H. JOHNSON, '22, number One of our chapter roll, is with the Safety Mining Company in Chicago. His home address is 623 East Willow Avenue, Wheaton, Illinois.

ALBERT C. MINETTI, '24, can be addressed 2233 Spokane Avenue, Mount Oliver Post Office, Pittsburgh, Pennsylvania.

LESLIE C. SCHWEITZER, '23, is at 1213 Meadow Street, McKeesport, Pennsylvania.

KARL H. VONKASKE, '24, attended the recent initiation and banquet at Nu Chapter. He is with Westinghouse Electric in Pittsburgh and is employed in the Research Division.

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## XI

CHARLES D. HIGHLEYMAN, '27, is now with the General Electric Company at 3816 Main Street, Lawrence Park, Erie, Pennsylvania.

RICHARD K. NELLER, '28, announced the birth of a son, Richard K. Jr., on May 19th, 1930.

WILBUR J. PETERSON, '28, is at 450 West Gilman Street, Madison, Wisconsin.

WESLEY S. WALKER, '26, is with the Linde Air Products Company. His address is 136 Bidwell Parkway, Buffalo, New York.

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## OMICRON

F. WILLIAM ASHTON, '30, is in the bridge room with American Bridge Company and his address is 413 Monroe Street, Gary, Indiana.

LAWRENCE S. CAIN, '29, is now acting as assistant field engineer for the 1933 World's Fair Commission in Chicago.

R. E. CRAWFORD, '26, is transmission engineer at the Bell Telephone Laboratories of New York. His address is 61 N. Arlington Avenue, East Orange, New Jersey.

DILLON EYERS, '30, received his B. S. in Chemical Engineering at the mid-year Convocation February 3rd and now joins the ranks of the alumni.

GORDON LUNT, '21, visited in Iowa City March 18th. He is still with the Pittsburgh Des Moines Steel Company in the Des Moines office.

ROBERT K. HEMPHILL, '30, is with the Electric Machine Manufacturing Company in Minneapolis, Minnesota and is living at 200 Harvard Street, S. E.

CECIL FAWCETT, '31, is now the proud father of a seven and a half pound boy, Kennedy Cecil.

HERRERT E. ("HAP") HOWE, '26, may not have gone on the rocks but we hear that he has moved to 802 South Limestone Street, Springfield, Ohio.

MYRON C. LITTLE, '26, is field engineer with Western United Gas and Electric Company. His address is 4536 Prince Avenue, Downers Grove, Illinois.

VERNER R. MUTH, '22, is now with the Department of Highways of Cook County, Illinois.

LAWRENCE A. WAKE, '26, is transmission engineer at the Bell Telephone Laboratories of New York. His address is 61 N. Arlington Avenue, East Orange, New Jersey.

JACK BOYLES, '27, being located in Iowa City again, has been seen around the pole-vaulting pit a few times lately. He took the pole for the first time in four years and cleared the bar at eleven feet without much effort.

FRANK EDWARDS, '28, announces the arrival of a new daughter, Carolyn.

ERNEST J. BEATTY, '27, was seen at the track meet in Madison, Wisconsin, recently. Ernie is feeling great and wanted to be remembered to everybody.

LOUIS M. WOLTERS, ex '25, is now located at Elgin, Illinois. He is with the Illinois Highway Department.

FLOYD SCHNEIDER, '28, was married last January 17 to Miss Emma Much of Gary, Indiana. Floyd is still with the Santa Fe Railroad and spends most of his time in Chicago although he resides in Gary.

## PI

HORACE A. BEALE, ex '27, has been with Mack Trucks at Parkersburg, Pennsylvania until recently.

WILLIAM G. BROWN, JR., '29, is engineer for the Atlas Powder Company. His address is Box 337, Y. M. C. A., Wilmington, Delaware.

IVY D. CARTER, JR., ex '29, is working for the Standard Oil Company in Lynchburg, Virginia. Carter resides at 505 Clay Street.

EDGAR W. DARE, '25, informs us that he joined the married ranks back in 1928 and at present is an engineer for the R. F. & P. Railroad Company. His address is 1104 Main Street, Fredericksburg, Virginia.

THEODORE B. EDWARDS, '24, is assistant engineer for Gibbs and Hill and is at 87-40 Elmhurst Avenue, Elmhurst, New York.

OLIVER GARLAND FLIPPEN, JR., ex '30, tells us he is Assistant Supervisor of the Richmond Branch of the Standard Oil Company. His address is Westmoreland Club,

Richmond, Virginia. He sends greetings to all brothers.

JAMES S. GODSEY, '30, is living at Cumberland, Virginia. Godsey expects to report to the Industrial Service Department of the G. E. Company in the late spring. "Republican Prosperity", he tells us, has prevented his reporting before.

RALPH HAWKINS, '26, is with the Rinehart Dennis Construction Company at Gawley Bridge, West Virginia.

E. T. HOLLAND, '25, is District Sales Manager of E. J. McHarg and Company in Cleveland, Ohio. He resides at 1408 East 25th Street.

ARTHUR W. HOLT, '26, is in Baltimore, Maryland with Bartlett Hayward Company. Holt lives at Scott and McHenry Streets.

HARRY R. HOLT, '29, is living at 89-19 Thirty-second Avenue, Jackson Heights, Queens, New Jersey. He is Junior Engineer for the New York and Queens Electric Light

and Power Company, and likes the job.

**JULIUS HUNT**, is at 222 Riverside Drive and 94th Street, New York City.

**EDWARD F. JOACHIM**, '28, can be found at 402 West Main Street, Charlottesville, Virginia. Joachim is Plant Engineer of the Model Steam Laundry there. He has been quite ill recently but has fully recovered.

**TYLER B. KIENER**, '24, resides at 411 Central Avenue, Orange, New Jersey. Kiener is employed by the Tri-Engineering Corporation, formerly known as the Public Works Engineering Corporation, at 40 Exchange Place, New York City. His work consists of water supply problems, structures and operation.

**PAUL KREBS**, '30, is with the Tennessee State Highway Commission, at Ducktown, Tennessee.

**BERNARD KYLE**, '29, is at present with the Bartlett Hayward Company in Brooklyn, New York. He is married and has one daughter.

**ROBERT E. LEE, JR.**, '29, is now with the Charlottesville Lumber Company at Charlottesville, Virginia.

**THOMAS M. LINVILLE**, '26, resides at 208 Ballston Avenue, Scotia, New York. He is at present in the third year of the General Electric Advanced Course in Engineering.

**D. ALEX MAYERS**, '30, is in Clearwater, Florida. He is the best broker in town (and the only one). Alex isn't married yet but his girl is still waiting for him. (That's what he thinks).

**LLOYD C. MAYERS**, ex '27, certified architect in Virginia, is architect for Buiswanger and Company at

Richmond, designing store fronts, carved glass and what not, besides having some private practice. Brother Mayers is married and has a three year old daughter. He informs us he is still out of the sheriff's reach, but wait till that daughter gets a little older.

**M. B. McDAVITT**, '24, is working for the A. T. & T. Company at 195 Broadway in New York City. Brother McDavitt is still single.

**L. R. MONTFORT**, '26, works in the Department of Development and Research of the A. T. & T. Company in New York City. He lives at 156 Walnut Street, Ridgewood, New Jersey.

**J. S. PARKER, JR.**, '26, is with Fuller and McClintock. Brother Parker lives at 118 Washington Street, Portsmouth, Virginia.

**WILLIAM WINSTON PARKINSON**, '23, is at 20 Aoba Shibuya-Machi, Tokyo, Japan. Brother Parkinson and his wife are missionaries and are studying languages in Tokyo.

**PAUL S. PEACHE**, '29, has recently been with the Westinghouse Testing Department.

**ROBERT G. PITZ**, '24, is Vice-president of Pitz Foundry, Inc., at 283 Scholes Street, Brooklyn, New York.

**LAWRENCE R. QUARLES**, '29, is Research Engineer for the Westinghouse Electric Company and reports that he is working on Glow Discharge tubes at the Westinghouse Research Laboratories. Mr. and Mrs. Quarles announced the birth of Miss Margaret Le Sueur Quarles on February 7th. Congratulations. But honest it looks like some of our brothers could give

us some nephews instead of so many nieces.

RUBEN R. RAWLS, '24, is in the Architectural Department of the National Biscuit Company at New York City. His address is 240 East Seventy-ninth Street.

JEAN MORRIS ROBERTS, '26, is Assistant Professor of Electrical Engineering, Speed Scientific School, at the University of Louisville. Brother Roberts has been married two years and is living at 635 Ervay Avenue in Louisville.

ROBERT FRANCH SELDEN, '27, works for the Bureau of Mines at the Pacific Experimental Station. He lives at 1577 Arch Street, Berkeley, California.

GEORGE M. TATUM, '24, is with the Virginia Public Service Company at Charlottesville, Virginia.

FRANCIS WILLIAM TAYLOR, '24, says we should give him credit for two daughters. We give him more credit for being assistant manager of the Warren Fish Company. Brother Taylor says he would be mighty glad for all the brothers who happen to be passing by to stop and pay him a visit. His ad-

dress is 222 West DeSoto Street, Pensacola, Florida.

TAYLOR F. TURNER, '27, is working with the U. S. Engineers in connection with flood control on the Mississippi River and its tributaries. His business address is Box 47, Monroe, Louisiana.

EARL H. VIA, '21, is engineer for the E. I. du Pont de Nemours and Company. Brother Via's address is 1100 Madison Street, Wilmington, Delaware.

WARREN VIA, ex. '29, is teaching school at present in South Carolina. His address is 921 Cherry Avenue, Charlottesville, Virginia.

MAX G. WALTON, '26, was married December 1930 and returned his card while on his honeymoon. Cooperation like that is really appreciated. Brother Walton received his M. A. from Columbia in 1929 and expects to get his Ph.D. in 1931. For the past three years he has taught English in the College Preparatory School and expects to Teach English in some New York college next year.

SAMUEL WISE, '22, is with the Bartlett Hayward Company in Baltimore, Maryland.

## TAU

HARVEY O. BANKS, '30, is an instructor in Civil Engineering at Stanford University, California. His address is P. O. Box 1104.

ROBERT BEAN, '30, is with the General Electric Company at Schenectady, New York.

FRED N. BENNER, '30, is in Pitts-

burgh, Pennsylvania with the Koppers Construction Company.

WILLIAM BRAMER, '30, is with the John A. Roebling Sons Company, at Trenton, New Jersey.

ROBERT FITZGERALD, '30, is with the Reliance Electric and Engineering Corporation in Cleveland, Ohio.

WILLIAM GIBSON, '30, was recently married. He is at present with the Montauk Beach Development Corporation at Montauk, L. I., New York.

NICK LEONE, '30, is working for the New York State Department of Highways.

CHARLES PIERCE, '30, is with the General Electric Company at Schenectady, New York.

J. M. SHAPPELL, '30, was married quite recently and is living in New York City. Brother Shappell is with the Eastern Underwriters Inspection Bureau.

## PHI

P. W. BARTHOLOMEW, '30, is toting sticks of dynamite for the Hercules Powder Company.

R. W. CARSON, '28, is still with the Westinghouse Company at Newark, New Jersey. He is doing mechanical development on electrical instruments as well as some research work.

H. B. CURRENS, '25, is with the Lily Varnish Company of Indianapolis, Indiana.

H. E. CURTIS, '29, is working for the Pittsburgh and Des Moines Steel Company at Pittsburgh, Pennsylvania.

C. N. DeVANEY, '30, is reported as being with General Electric.

B. S. DIVAN, '29, is still with the Baldwin Locomotive Works.

A. E. FILLINGER, '30, is taking up music; he is making rubber bands for the Goodyear Rubber Company.

H. E. GOTTRAG, '25, is still with the

American Railway Association at Purdue.

J. K. HANEY, '30, had a job last fall with the Grasselli Chemical Company of East Chicago. We suppose he still has it unless the depression has ruined the company.

R. K. PENCE, '30, is now with the Rapid Transit Company of Chicago. He may be collecting fares or pushing a pencil behind a mahogany desk; we haven't been informed yet.

T. C. HANSON, '30, is now teaching Algebra at the University of Detroit.

D. B. MACLAREN, '30, is stretching things with the Firestone Tire and Rubber Company.

J. M. SCOTT, '29, spent part of last summer in the hospital having his appendix removed. He is working for Lily Varnish Company of Indianapolis, Indiana.

## CHI

JOHN L. ANDERSON, '30, is now clerking in the Co-operative Book Store of the University of Arizona. His address is 1510 East First Street.

IRA BACON, '28, is a mining engineer

for the American Smelting and Refining Company, at Hayden, Arizona.

FRED D. DENNY, '30, is testing engineer for the General Electric Company at Erie, Pennsylvania. His address is 1018 Newton Avenue.

DON FARKER, ex '31, is now employed by the Pima County Highway Department at Tucson. He was married on August 20, 1930, to Miss Georgia Wyatt, a member of Chi Omega Sorority, of Ohio State University. His address is 411 North Tyndall, Tucson, Arizona.

LOUIS O. FICEL, '26, is working in the Pinal County Highway Department at Florence, Arizona.

JACK GILBERT is now traveling resident engineer with the Arizona Highway Department. Along with this new position has come a nice raise in salary. The type of work in which he is specializing is the oil processing of roads.

ROY M. GOAR, '30, is testing engineer with the General Electric Company and has recently been transferred from Schenectady to Erie, Pennsylvania. His address is 1018 Newton Avenue.

ROBERT E. S. HEINEMAN, '26, is with the Arizona Bureau of Mines.

JACK HOPPER, '30, is at 1210 Van Vranken Avenue, Schenectady, New

York. He is testing engineer for General Electric Company.

CHARLES McCAMIE, '30, is still holding down his combination job with the Pima County Road Department, the Arizona Highway Department and the Bureau of Public Roads.

DAVID C. MILTON, JR., '30, has a fellowship in the Arizona Bureau of Mines and is working on the treatment of gold ores.

JOHN WILLIS MONTGOMERY, '29, is working for the Western Pipe and Steel Company at Los Angeles, California. He lives at 1132 South Manhattan Place.

HENRY PEARSON, ex '32, is not at school this year but is working as radio installer for Montgomery Ward in Tucson. His address is 631 East Second Street, Tucson, Arizona.

PAUL SHAW, ex '32, who will probably return to school next year, lives at 780 Brighton Street, El Centro, California.

WILLIAM T. WISHART, '30, is a bridge inspector and can be reached through Box 953, Bisbee, Arizona.

### ENGINEERS' SALARIES

What salary should an average successful man be earning at the age of 40? The *Deltausig* made a study of this question and gave the following answer by professions: Medicine, \$9,100; law, \$6,600; chemistry and chemical engineering, \$5,300; dentistry, \$8,000; civil engineering \$5,500; electrical engineering, \$5,500; mechanical engineering, \$5,200; research science, \$5,900; ministry, \$3,500; teaching, \$4,000; advertising, \$6,750;

insurance, \$6,900; banking, \$6,500; sales management, \$7,500; general business executive, \$6,900; investment banking, \$6,500.

### CHICAGO ALUMNI ASSOCIATION

The Chicago Alumni Association at its last meeting elected Roscoe E. Robins, Sigma '26, as president, and Dick Van Gorp, Omicron '26, as secretary.



## HONORS

### TAU BETA PI

- Alpha—Rudolph M. Hanson.  
Gamma—C. L. Barker, Arthur Bennet, Claude Wilkerson.  
Delta—L. H. Bastian, W. O. Binder, G. N. Gray, H. J. Kirkstadt, M. A. Weppner.  
Epsilon—C. F. Bedford, L. R. Goldsmith.  
Zeta—Irving Coffman, Henry Hood, L. C. Hopkins, Jr., Clair Wood, Jack Worner.  
Theta—M. W. Heath, R. H. Knapp.  
Iota—V. F. Ancell, B. S. Followill, E. W. Heilig, A. S. Macke, Rex Monroe, W. J. Ware, R. Z. Williams.  
Kappa—J. F. Chanfler, Don Johnstone, C. I. Luckman, M. S. Ketchum, Jr.  
Mu—Guthrie Mabrey.  
Nu—C. K. Carter, R. O. Holmes.  
Omicron—W. A. Blaser, C. C. Haug.  
Sigma—M. P. Buck, Charles Cancik, Donald C. French, Charles L. Lucal, S. R. Rudin, Robert E. Speer.  
Tau—Earl Auyer, Edward Backman, Donald Bibbens, Tilroe Hedden, Frank Heller, Walter E. Moulton, Arnold Pfaffhausen, Malcolm Reed, Harry Williams.  
Chi—Earl R. Bennett, Delos Gardner.

### SIGMA XI

- Epsilon—E. J. Bradshaw, Fitch.  
Theta—Stephen R. Bradley, Jr., Geoffrey Edward Clifford, John L. French, Forest Grant, Jr., George A. Wilkins.  
Sigma—George F. Leydorf.

### PI TAU SIGMA

- Alpha—Clifford O. Anderson, Colberg.  
Nu—M. A. Kinley, Wm. J. McGregor.

### PHI LAMBDA UPSILON

- Theta—Geoffrey Edward Clifford.  
Omicron—Leo Aschenbrenner.

### ETA KAPPA NU

- Nu—C. K. Carter, S. J. Myers, M. W. Smedberg, H. R. Wall.  
Sigma—Charles L. Lucal, Carl G. Simon.

### PI TAU PI SIGMA

- Alpha—Francis J. Biltz, Webster F. Soules, Martin A. Agather.

### PHI KAPPA PHI

- Iota—B. S. Followill, W. J. Ware, R. Z. Williams.  
Tau—Earl Auyer, Tilroe Hedden.

### PHI MU EPSILON

- Tau—Earl Auyer, Edward Backman, Donald Bibbens, Joseph Carrol, Tilroe Hedden, Walter Moulton, Arnold Pfaffhausen, Malcolm Reed.

## New Publications

- BRADLEY, F. W., Hon. Epsilon  
Metal Prices,  
*Mining and Metallurgy*, Vol. 11,  
No. 288.
- DEVANEY, F. D., Mu '25 ex Alpha, in  
collaboration with Mr. J. B. CLEM-  
MER,  
Concentration of Manganiferous  
Iron Ore,  
*Reports of Investigations* No.  
3045, U. S. Bureau of Mines.
- DEVANEY, F. D., Mu '25 ex Alpha,  
in collaboration with Mr. W. H.  
COGHILL,  
Concentrating Tests on Tailings  
from the Washing Plants of the Me-  
sabi Range,  
*Reports of Investigations* No.  
3052, U. S. Bureau of Mines.
- EDDY, CORBIN T., Beta '26  
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#### MINING FELLOWSHIPS OFFERED

The department of mining and metallurgical research of the Utah Engineering Experiment Station, maintained by the University of Utah in co-operation with the U. S. Bureau of Mines, is offering five fellowships for the year 1931-1932. Incomes are \$720 for the year beginning July 6 and ending June 4. Further information may be obtained from the director of the station, University of Utah, Salt Lake City, Utah.

The Engineering Experiment Station at the University of Illinois is offering a total of sixteen graduate assistantships, for research on various engineering problems, including mining and metallurgical. Incomes are \$600 for the year beginning Sept. 1. Further information may be obtained from addressing the director of the station, at Urbana, Ill.

—*Engineering and Mining Journal*.

#### PROFESSIONAL INTEREST

Basically all fraternal organizations are built about good fellowship and most of the best in each of us was rubbed off the almighty good that God put in some fellowman. The social fraternity serves a wonderful purpose in college life. But while the hand of good fellowship is one of the basic rocks in our foundation we must not lose sight of the very vital fact that our existence is intimately interwoven into the warp and woof of the marvelous and mystic mantle of chemistry.

Professional interest! To lack it indicates a selfish gregariousness of an organization fallen away from the ideals of its founders and paying its dues to bear the prestige of an honorable name. To possess it means alertness to the opportunity of serving our fellowmen while serving ourselves.—*The Hexagon of Alpha Chi Sigma.*

## LOST THETA TAU ALUMNI

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

### *Alpha Chapter*

Clerry, Harold F., '22  
Kruiger, Walter R., '29  
Pearson, Enos O., '27  
Pearson, Harold T., '27

### *Beta Chapter*

Alsup, Albert A., '09  
Evans, Carl W., '11  
Fay, Wm. W., ex '22  
Hogge, Edw. J., Jr., '23  
Logan, Walker, B., '09  
Rikat, Eugene A., '10  
Seeneidt, Lloyd J., '28

### *Gamma Chapter*

Anderson, Robt. A., '27  
Auman, Egbert E., '24  
Burney, Arthur Y., ex '28  
Clapp, Leroy P., '08  
Clochier, Conrad F., '24  
Davis, Thomas, '25  
Gahagan, Donald L., '27  
Gibson, Robt. W., '18  
Graham, David J., '21  
Jones, David L., '22  
Mahoney, John J., '19  
Reicken, Hugo, '27  
Sloan, F. P., ex '26  
Stanford, Joel G., '21  
Stewart, Clifford H., '21  
Walker, Stanley M., '11  
Young, Guy K., '18

### *Delta Chapter*

Arms, Chas. S., '12  
Jenks, Karl E., '19  
Monley, Edgar T., '24  
Seecio, Carl, '18  
Sprawl, Norman E., '17  
Wherry, Harry B., '21

### *Epsilon Chapter*

Davis, Sherwin B., '12  
Vail, Randolph R., '11  
Wilson, Frank L., '12

### *Zeta Chapter*

Bartell, Albert R., '17  
Bear, Dannie M., '23  
Bell, Arnold A., '18  
Bown, Wm. F., '21  
Bruch, Wm. W., '21  
Brown, Nathan W., '14  
Davis, Clifford G., '26  
Deaver, Ray E., '17  
Herndon, Harold D., '23  
Holt, Hubert C., '18  
Hunt, James L., '16  
Kennedy, Alex S., '25  
Kennedy, Mason H., '26  
La Mer, Joe S., '18  
Madden, J. Edgar, '18  
McCune, Malcolm L., '11  
Notting, Floyd L., '18  
Painter, Chas. J., '11  
Patterson, Robt. S., '27  
Rue, G. Edmund, '23  
Rutledge, Robt. M., '22  
Ward, Richard B., '13

### *Eta Chapter*

Benton, Herbert G., '15  
Brotherton, Wm. G., '13  
Dickson, Benj. A., '22  
Polley, Ernest E., ex '17

### *Iota Chapter*

Burg, Robert, S., '16  
Robertson, Edw. E., '24  
Stuart, Samuel H., '23  
Watkins, Marion W., '23  
Wright, Kenneth M., '20

### *Kappa Chapter*

Arning, Henry U., '24  
Bartlett, Charles H., '21  
Bates, Gardner O., '24  
Blair, James A., '21  
Borgeson, Carl A., '21  
Bowersock, Wm., '19  
Brenderick, James R., '26  
Foulke, Ronald E., '18  
Hasker, Harry G., '20  
Happenny, John C., '21  
Jackel, Herbert A., '23  
Johnson, Ralph B., '20  
McClelland, Ralph L., '22  
McEvers, Ernest M., '20  
Peterson, Donald E., '18  
Reichelderfer, Harry, '18  
Robinson, Gus. W., '24  
Tucker, Morrell L., '26  
Welch, J. R., '24  
Wharton, Russell F., '22

### *Lambda Chapter*

Anderson, C. Milton, '20  
Browning, Thos. C., ex '23  
Christensen, L. A., ex '11  
Farmworth, Wayne H., '24  
Fredericksen, Louis J., '27  
Grey, John S., '23  
Hardy, Edw. V., '21  
Jones, Gus. M., '27  
Rumph, Lee M., '21  
Smith, Wm. A., '22  
Stephens, Leone R., ex '21  
Wadsworth, Darrell B., '26

### *Nu Chapter*

O'Connor, John M., '26  
Porterfield, David C., '23

*Omicron Chapter*

Bowman, P. F., '22  
 Eaton, Malcolm, '24  
 Fisher, Darrell, '21  
 Flanagan, E. J., '29  
 Gunderson, Wendel, '28  
 Rich, Edmond, '22  
 Spear, R. B., '31

Rye, Frederick S., '26

Thayer, F. W., '26

Smith, Perry M., '28

Stoddert, Wm. W., '27

Sutton, Edw. A., '26

*Pi Chapter*

Vought, Harry K., ex '26

Weir, Paul L., '23

*Tau Chapter*

Neal, Harold, '30

Vincarrondo, J. E., '30

*Xi Chapter*

Müller, Noul H., '26

*Rho Chapter*

Biberstein, Richard V., '21

Jenkins, Donald B., '22

*Phi Chapter*

Mills, Edward E., '26

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

F. L. MERCER and J. W. HOWE,  
 GEAR Editors.

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## THETA TAUS ON OSAGE RIVER DEVELOPMENT

BROTHER EDWIN NIELSEN, author of the article on the Osage Hydro-Electric Project appearing in this issue of THE GEAR, tells us that he knew only 33.33% of the engineers on the development, but of these men the following were brothers in Theta Tau:

W. S. Frame, Iota '24

W. H. Hamilton, Eta '26

W. O. Dittmer, Iota '29

A. R. Nieman, Kappa '29.

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Engineer: "That looks like a well made transit but how good is the telescope?"

Salesman: "Say! When you look at anything under ten miles away through that telescope it looks as though it were right behind you!"

—Illinois Alumnus.

Chem. Prof: "Name three things that contain starch."

Freshman: "Two cuffs and a collar."

—*The Quarterly of Phi Pi Phi.*

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Nurse: "It's a boy, Professor."

Prof. "What is?"

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The baseball game that was going on in Farmer Brown's pasture came to a sudden end when Percy Ambrose slid into what he thought was home plate.

—*The Quarterly of Phi Pi Phi.*

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Visitor: "Is that your son's collegiate fiver that he came home in?"

Mother: "No, he really had a wreck."

—*Aggrieved.*



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no question about  
it if he would  
give her

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