

# The Wisconsin alumni magazine. Volume 15, Number 9 June 1914

[s.l.]: [s.n.], June 1914

https://digital.library.wisc.edu/1711.dl/QGZB5COYM65WR83

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see http://digital.library.wisc.edu/1711.dl/Copyright

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

#### THE ALUMNI ASSOCIATION

OF THE

#### UNIVERSITY OF WISCONSIN

#### **EXECUTIVE COMMITTEE:**

ERNST VON BRIESEN, '00 MRS. E. D. SEWALL, 79 Vice-President CARL H. TENNEY, L-'96 Recording Secretary CHARLES N. BROWN, L-'81

DR. ALBERT J. OCHSNER, '84 LYNN S. PEASE, '86, L-'91 GEORGE A. BUCKSTAFF, L-'86 MARY F. CONNOR, '86 MRS. C. R. CARPENTER, '87 THOMAS R. LLOYD-JONES, '96

ALUMNI HEADQUARTERS: 821 STATE STREET, MADISON Louis P. Lochner, '09, General Secretary

# The Wisconsin Alumni Magazine

OFFICIAL ORGAN

"A Magazine Aiming to Preserve and Strengthen the Bond of Interest and Reverence of the Wisconsin Graduate for Bis Alma Rater."

#### CONTENTS FOR JUNE, 1914

	AGE.
Prehistoric Indian Mounds on the University Grounds—C. E. Brown	383
The 1914 Commencement Orator—G. C. S.	390
The University of Wisconsin-L. G. Armstrong	392
Reminiscences of Early Days-F. Q. Pall	396
Class of 1909 Reunion	398
Editorial	400
The Wisconsin Alumni Clubs	402
Important Reunion Notices	405
Engineering Directory	406
Book Reviews	432
From the Campus	433

THE WISCONSIN ALUMNI MAGAZINE is published monthly during the School Year (October to July, inclusive) at the University of Wisconsin.

ALUMNI DUES—Including subscription to The Alumni Magazine—\$2.00 a year, "payable on or before July 1 of each year for the fiscal year beginning May next preceding.

1 next preceding."
SUBSCRIPTION to The Wisconsin Alumni Magazine alone, without the privileges of membership: \$1.00 a year; foreign postage 50 cents extra.
CHANGE OF ADDRESS must be reported before the 21st of the month to insure prompt delivery at the new address.
DISCONTINUANCES. Subscribers should notify the manager if they wish the Magazine discontinued at the expiration of the time paid for. If no notice is received, it will be understood that a continuance is desired.
REMITANCES should be made payable to The Wisconsin Alumni Magazine and may be by check, draft, express or postal money order; personal checks should be drawn "Payable in exchange." All mail should be addressed to

THE WISCONSIN ALUMNI MAGAZINE, 821 STATE STREET, MADISON Entered at the Post Office, Madison, Wis., as second class mail matter.

#### **ALUMNI PROFESSIONAL DIRECTORY**

#### A RELIABLE GUIDE TO WISCONSIN MEN OF YOUR PROFESSION

This directory affords a convenient guide to Wisconsin Alumni of the various professions who may wish to secure reliable correspondents of the SAME PROFESSION to transact business at a distance, or of special professional character. It is distinctly an INTRA-PROFESSIONAL directory. Alumni of all professions, who by reason of specialty or location are in a position to be of service to Alumni, are invited and requested to place their names and addresses in this directory. For convenience, it has been divided up into states.

#### COLORADO

JOHN H. GABRIEL

Attorney at Law
712-13 Kittredge Bldg. Denver, Colo.

#### ILLINOIS

SILBER, ISAACS, SILBER & WOLEY
Fred D. Silber, '94
Attorneys
General Corporation and Commercial
Practice
1020-1023 Home Insurance Bldg.,
LaSalle and Adams St., Chicago.

#### MINNESOTA

EUGENE C. NOYES, '98

Attorney at Law

246 Security Bank Building

Minneapolis, Minn.

#### NEBRASKA

MONTGOMERY, HALL & YOUNG
Attorneys at Law
Carroll S. Montgomery, '72
Matthew A. Hall, L. '88
Raymond G. Young
Harland L. Mossman
619-629 Omaha National Bank Building
Omaha, Nebr.

#### SOUTH DAKOTA

BOYCE, WARREN & FAIRBANK
Attorneys at Law
J. W. Boyce, '82-'85
Boyce Building Sioux Falls, S. D.

#### OHIO

Joe G. Fogg, '04 CALFEE & FOGG

Lawyers

1608-10 Williamson Bldg., Cleveland, O.

#### OREGON

CONRAD P. OLSON, '09
Attorney at Law
529-31 Chamber of Commerce Bldg.
Portland, Oregon.

#### WASHINGTON

Herman S. Frye, '99 Heber B. Hoyt, '97 Hiram C. Gill, '81

> GILL, HOYT & FRYE Attorneys at Law

Offices: 426-429 Colman Building Seattle, Wash.

# New Post Cards of the

# WISCONSIN STATE PARKS

Our Parks are not surpassed in natural scenic beauty anywhere in the United States

Every man and woman loyal to Wisconsin should send 50 one cent stamps for a complete set of 50 cards.

#### THE BISHOP POST CARD CO.

(B. O. BISHOP '08)

RACINE, WISCONSIN

We want both men and women to sell our State Park Cards. Write for terms

# FINE INKS AND ADHESIVES For those who KNOW



# Higgins'

Drawing Inks
Eternal Writing Ink
Engrossing Ink
Taurine Mucilage
Photo Mounter Paste
Drawing Board Paste
Liquid Paste
Office Paste
Vegetable Glue Eto.

Are the Finest and Best Inks and Adhesives

Emancipate yourself from the use of corrosive and ill-smelling inks and adhesives and adopt the Higgins' Inks and Adhesives. They will be a revelation to you, they are so sweet, clean, well put up, and withal so efficient.

At Dealers Generally

CHAS. M. HIGGINS & CO. MFRS.

Branches: Chicago, London

271 Ninth Street, Brooklyn, N. Y.

# "Here is Your Answer;" in WEBSTER'S NEW INTERNATIONAL

Even as you read this publication you likely question the meaning of some new word. A friend asks: "What makes mortar harden?" You seek the location of Loch Katrine or the pronunciation of jujutsu. What is white coal? This NEW CREATION answers all kinds of questions in Language, History, Biography, Fiction, Foreign Words, Trades, Arts and Sciences, with final authority.



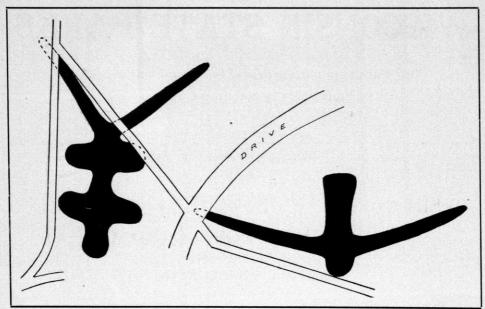


FIGURE 1

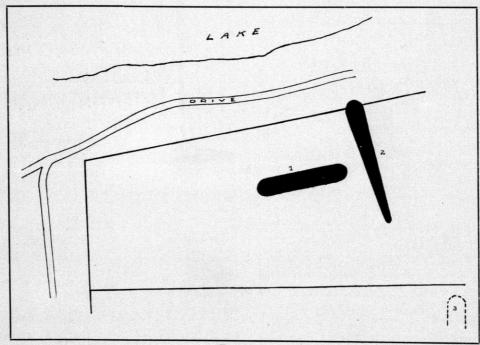


FIGURE 2
PREHISTORIC INDIAN MOUNDS

# The Wisconsin. Flumni Magazine

I, a wandering student, seeking knowledge, came knocking at the gates of the great University of Wisconsin, and it took me in, filled me with inspiration, and when I left its doors the kindly people of the state stretched out welcoming hands and gave me a man's work to do.—An Alumnus.

Volume XV

Madison, Wis., June, 1914

Number 9

# PREHISTORIC INDIAN MONUMENTS ON THE UNIVERSITY GROUNDS

By CHARLES E. BROWN

Curator of the Historical Museum



N no region of a similar area in the state are there to be found so great a number of ancient Indian earthworks as in that about the three lakes surrounding the city of Madi-

son. Every attractive point or sweep of shore-line about these beautiful bodies of water is or was once the site of a group of mounds. Although many of these remarkable earthen monuments have now been needlessly destroyed, a large number of them yet remain to interest all who may desire to become acquainted with the archaeological history of the site of Madison.

Recent investigations conducted by the Wisconsin Archaeological Society show that there were formerly located about Lake Mendota thirty, about Lake Monona twelve, and about Lake Wingra eleven groups of Indian earthworks. Six of these groups, all of them on or near the shore of Lake Mendota, were located on land now owned by the University of Wiscon-

The classes of mounds represented in the Madison groups are the conical or burial, the linear or wallshaped, and the effigy or emblematic. Represented among the numerous effigy types are animal-shaped structures intended to represent the eagle. goose, bear, panther, fox or wolf, and turtle. Nearly every effigy type found in the southern half of the state is represented by one or more examples in the Madison area. This fact is significant since it plainly indicates that at one time or another all of these ancient Indian clans had villages here. From this we may infer that in the distant past the site of the present capital city was an Indian clan or tribal center. Attracted no doubt by the abundance of fish, game and vegetable food, and by the greater security obtained through the presence of other friendly clans of their own tribe, these clans chose this region as their home. Where their villages were once located are found the conical mounds which are the burial places of their distinguished dead and the emblematic earthworks which are the totems or clan emblems of their inhabitants.

As the purpose of the present article is to describe the groups of ancient Indian earthworks now and formerly located upon the property of the state university, the writer may not at this time enter into a discussion of some of the many problems which archaeological investigators in this state are now endeavoring to solve. It may be stated, however, that these effigy mounds, which are confined almost wholly to Wisconsin and which have been for many years an object of wonder to the archaeologists of the United States, by their character and their distribution in the state form one of the most important clues to our ever broadening knowledge of the habitats, migrations, social organization and religion of Wisconsin's prehistoric Indian inhabitants. The results of seventy-five years of survey and exploration work in the state, beginning with the surveys begun by Dr. Increase A. Lapham in 1836 and continued in recent years by the state archaeological society. have at length placed at our command the data by means of which the life history of these people may be to a large extent unravelled. In the State Historical museum at Madison and in other public museums in Wisconsin are now assembled valuable collections in clay, stone, bone and metal implements which serve to explain the industries and commerce of the pre-Columbian red men.

By leading archaeologists and ethnologists the Winnebago, a prominent Wisconsin tribe, are now considered to be the builders of the emblematic mounds and associated earthworks scattered in such great numbers over the southern half of this state. The customs, traditions and history of this tribe all appear to give support to this conclusion. These people reached Wisconsin during a prehistoric westward migration of certain tribes of the great Siouan family of American Indians from their original habitat in Virginia and the Carolinas. Archaeological researches conducted in the regions afterwards occupied by some of these tribes, both east and west of the Mississippi river, appear to indicate that some of them besides the Winnebago were also builders of earthen monuments.

In the following paragraphs descriptions of the Indian earthworks located upon the grounds of the University of Wisconsin are given.

#### UPPER CAMPUS.

According to the late Dr. Reuben G. Thwaites an effigy mound was at one time located at the head of the upper campus where University Hall now stands. It was destroyed when this building was added to the university plant in 1858. It is said to have been an effigy of the common and widely distributed "panther" type. Mr. I. N. Stewart states that two mounds, linear in form, were located between North Hall and the lake These were quite prominent. They were destroyed in the levelling of the land. Some traces of one long, narrow mound could still recently be seen. It is not known whether there were any burial (conical) mounds on the crest of the upper campus.

#### OBSERVATORY HILL GROUP.

#### Figure 1.

On the crest of Observatory hill are preserved the two effigy mounds shown in Figure 1. They are located

at the western extremity of this ridge and within a short distance of Washburn Observatory, Agricultural Hall and the old Horticultural building. One of the mounds is the effigy of a bird. Its wings are spread and it is represented as flying toward the south. The length of its body is 521/2 The width of its head is 121/2 feet. feet. Just below the wings its body is 13 feet wide and at the end of the tail 17 feet wide. The wings are each about 11 feet wide at their union with the body. A portion of each wing has been obliterated by the levelling of the lawn. This effigy originally had a wingspread of about 133 feet. Other bird effigies of this form are found about the Madison lakes.

The other effigy, which lies but a few feet west of the bird mound, is thought to be intended to represent the turtle and bears a strong resemblance to some of the numerous conventionalized representations of that reptile. It differs from other turtle effigies, however, in having two converging instead of one central caudal appendage.

In this remarkable mound this reptile is represented in the act of crawling over the crest of the ridge. total length is 104 feet. Its four limbs are from 18 to 22 feet in length. The width of the body between the limbs is 101/2 feet. One of its limbs and the tails are mutilated by the laying of a concrete walk over portions of The mutilation of these fine mounds is greatly to be regretted. It might have been avoided if a proper interest in their protection had been shown by those in authority at the time. The plat of these mounds from which this illustration is copied was made by Dr. Arlow B. Stout, in 1905. One or more conical mounds formerly located on the land below the ridge were destroyed when Agricultural Hall was erected.

These mounds were marked by the university in 1909, at the request of the Wisconsin Archaeological Society, with temporary explanatory wooden signs. They are now to be replaced by the Board of Regents with artistic bronze tablets. The mounds are viewed each year by thousands of students, and by hundreds of visitors from all parts of Wisconsin and other states who take the long walk across the grounds for the express purpose of seeing them.

In the orchard below Observatory hill and between it and the Lake Mendota shore, evidences of an Indian camp and workshop site have been found. Flint chips were formerly scattered over the ground in parts of this orchard. Numerous flint arrow points and several grooved stone axes and celts have also been found here in past years.

DRIVE GROUP.

#### Figure 2.

These mounds are located in a strip of wooded pasture on the University farm, a short distance northwest of the residence of Dean H. L. Russeil, and near the Lake Mendota shore. The lake shore drive passes by them. The linear mound is 92 feet in length and has a uniform width of 17 feet. It is about 3 feet high. The tapering mound is 123 feet in length and 20 feet wide at its widest part, where it is crossed by the fence. About 5 feet of its widest end extends be ond the fence to near the edge of the drive. At this place it is about 3 feet high. Both of these mounds are quite well preserved. In the northeast corner

of the adjoining field was a third mound, probably formerly also linear in form. It is now nearly obliterated through cultivation.

CREEK GROUP.

#### Figure 3.

This group consists of three mounds of curious form located near the creek, on the experiment farm of the agricultural department of the university.

other. The body of this mound is about 100 feet long and 20 feet in width. It is about 2 feet high at its highest part.

Across the road from this mound, in a wooded pasture, are two tapering mounds both unlike any which have been encountered elswhere about Lake Mendota. The smaller of the two is 52 feet in length. It has a projection on one side of its widest extremity. The other mound has a

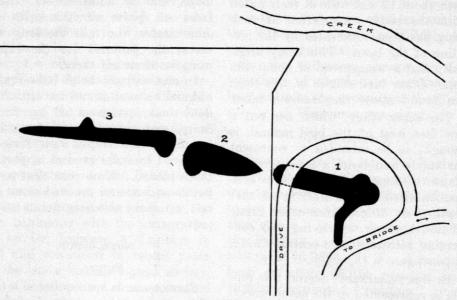


FIGURE 9

All are within a short distance of the Lake Mendota shore. No. 1 is located on a small oval encircled by the drive. It is surrounded by evergreen trees and its presence is therefore noted by but few of the hundreds of persons who walk or drive by it. The drive cuts through a portion of one extremity.

It is not certain but that this mound has lost through grading of the land at the time of the making of this road and grading of this portion of the oval, on one side of its body, a wing similar to that which appears on the projection at one end and another about half way down its opposite side. This mound is 133 feet in length.

On the west side of the creek on the higher land near the university sand pit are to be seen the usual surface indications of an Indian camp site. After the plowing of this field, in 1911, the writer collected here a considerable number of flint arrowpoints and potsherds. A sandstone arrowshaft grinder was also obtained here. At this time flint chips and the burned and cracked stones from the wigwam fireplaces were quite numerous on the surface of the ground. Early settlers of Madison state that the small grove below the sand pit and fronting on the willow drive of Picnic Point bay was up to about the year 1885 a favorite camping ground of the Winnebago Indians who gathered here, sometimes in considerable numbers. They came largely for the

1909, an effort was made by the writer in behalf of the Wisconsin Archaeological Society to secure the permanent preservation of the three mounds composing this group. All were then unmutilated and otherwise in fine condition. This attempt, however, failed of success, it being stated that the ridge-top was required by the ag-

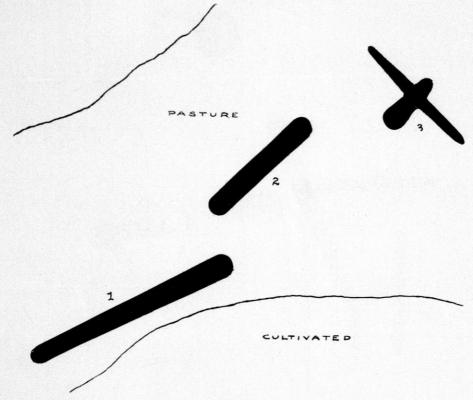


FIGURE 4

purpose of hunting the muskrats which were then numerous in the adjoining marshes.

RIDGE GROUP.

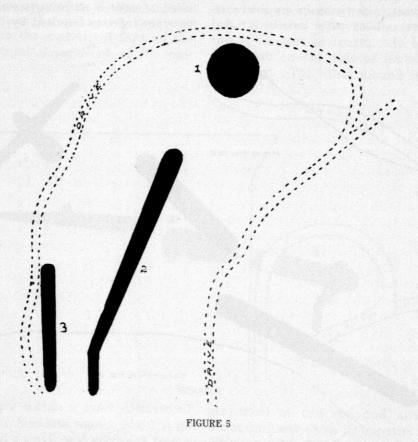
#### Figure 4.

The group of mounds shown in this figure was situated on the top of a ridge, on what is now known as the new university fruit farm, located to the west of the stock barns. In May

ricultural department for the planting of an experimental orchard and with the planting and cultivation of which these earthworks would interfere. In preparing the land for the setting out of the trees mounds Nos. 2 and 3 were destroyed, mound No. 1 alone being spared. The latter, the largest of the two linear earthworks, is 165 feet in length and about 14 feet in width at one extremity and 17 feet

in width at the other. It is about 2 feet high at its highest part. Mound No. 2 was 96 feet in length, and had a uniform width of 17 feet. It was of about the same height as mound No. 1. The bird effigy (No. 3) was of a type common to a number of Madi-

and which now forms a part of the grounds of the University of Wisconsin. This crest is said to be about 125 feet above the level of the lake. Its northern side slopes very steeply down to the lake shore. It is thickly wooded on all sides.



son mound groups. The length of its body was 45 feet, and it had a wingspread of 94 feet. The height of its body was about 2 feet. It is greatly to be regretted that all of these fine mounds could not have been spared.

EAGLE HEIGHTS GROUP.

#### Figure 5.

These mounds are located on the crest of Eagle Heights, a promontory on the south shore of Lake Mendota.

The mounds are encircled by a drive. No. 1, the conical mound, lies directly at the edge of the drive. This fine mound is 40 feet in diameter and was formerly about 5 feet high. A slight depression on its top shows where it has been several times dug into in recent years by relic-hunting summer resorters of the neighborhood. Both of the other mounds are of the tapering linear form. They are partly hidden by young trees and shrubs.

The larger is 208 feet long and 14 feet wide at the broadest extremity. The smallest mound (No. 3) is 100 feet long and 10 feet in width at its broadest extremity. It lies by the side of the drive but is partly hidden by shrubbery.

It is to be hoped that these mounds will never be disturbed.

PRESERVATION OF THE MOUNDS.

During the year 1912 all of the mound groups on the university grounds not already marked were marked with explanatory wooden tablets. This has been the means of interesting in these prehistoric Indian memorials many students and other visitors who formerly passed by and over them without noticing them.

The Indian earthworks on the university grounds have received very little attention from officers in the past. They have been mutilated and obliterated at will. Only now and then has a protest against this de-

structive work been heard. It is a pleasure, therefore, to note that in the past several years a live and growing interest in their historical and educational value and permanent preservation has been aroused. This should have a widespread good effect in other parts of the state where valuable aboriginal monuments are being needlessly destroyed each year because their owners and communities do not yet realize their importance and value. The good example now being set by the university will soon be emulated in many places.

The state legislature of 1911 enacted a law prohibiting the destruction, mutilation or removal of prehistoric or historic Indian remains located upon the public lands, state parks, forest reserves, lands of state educational or other state institutions, or upon other lands or properties belonging to the state. A penalty of fine or imprisonment or both is provided for the violation of this statute.

#### KEYSTONE REUNION

THE Keystone alumnae will hold their first annual banquet in Lathrop Hall at 12 o'clock noon on Alumni Day, and will have as their guests of honor the Keystone members who are to be active the following year.

This arrangement is in accordance with a resolution drawn up at the Devine cottage last summer when an alumnae chapter of Keystone was formed in order that its members, having gained experience by their completed duties as active members and having acquired a new perspective from their consequent disassociation with the work of the organization, may come together each spring to talk over the problems of the coming year with those who will be actively in charge of the work.

Because Keystone (an organization made up of the presidents of every woman's organization in the university) represents the spirit of leadership and moral support of women's activities at the university, its possibilities for constructive work among the women students are many and varied, and it is hoped that this banquet may be the inspiration of a new year's work.

### THE 1914 COMMENCEMENT ORATOR

By G. C. S.



R. James A. Macdonald, editor of the Toronto Globe, whose appointment as "Commencement Orator" at Wisconsin, the coming June, has just been announced, is a well-known

figure in the public life of Englishspeaking North America.

Born in Canada in 1862 of Highland Scottish ancestry, educated in Toronto and Edinburgh, and LL.D., Glasgow; Presbyterian minister, 1891-96, editor of *The Westminster*, 1896-1902, and of *The Globe*, the leading daily of Canada, since 1902; member of the Board of Governors [Regents] of the University of Toronto, since 1906, and a member of the Board of Directors, World Peace Foundation, Boston—such are the formal facts in the career of Dr. J. A. Macdonald, preacher, publicist, and orator.

In politics he is a Liberal, which means that he is a progressive, and his strenuous politics have brought him a glorious harvest of libel suits; he is a close friend of former President Taft, and has been likened, by a prominent American journalist, to President Wilson: "He and Woodrow Wilson are the two men on this continent who are speaking fully, philosophically, and illuminatingly upon the theme of democracy." All of which would seem to show that the political parties have much in common.

Dr. Macdonald is an ardent champion of Home Rule for Ireland, and, militant Presbyterian though he is, a believer in the squareness and fairness of the Catholic majority in Ireland. A quotation in the Globe, from an article written in collaboration by Carson's son (who is a Home Ruler) and Redmond's nephew (who is a Unionist), may serve as the key to Macdonald's confidence in a united Ireland. "Come, come, gentlemen of the older generation, we of the newer have already shaken hands, and politics and religion alike can only suffer from these personal recriminations and racial distrusts, which are for the most part merely the wreckage of controversies long since dead and grievances long since remedied."

The "twin notes of the Macdonald utterances" are democracy and internationalism: "I know the cry of the unprivileged multitudes. I know also that wealth has its problems and there are among the rich those who have a high desire to do justice. For both classes there is no permanent and adequate solution of the problem that does not change the motives and viewpoints of men. This is the church's greatest chance—to reconstruct the brotherhood."

As a champion of internationalism Macdonald has sought not to attenuate but rather to ennoble national patriotism by driving home to his auditors or readers the underlying brotherhood of the different peoples. He has fought for reciprocity between Canada and the United States, and in the negotiations relating thereto he earned the title as Canada's unofficial envoy to this nation; he has carried greetings from President Taft to the Scottish Presbyterian Assemblies; he

has kindled the fires of a nobler patriotism in the hearts of the members of the Canadian Club of New York, and at the Fort Erie Peace Celebration, in the summer of 1913, he has extolled the glories of a century of



DR. JAMES A. MACDONALD

unarmed peace along the four-thousand-mile frontier of the United States and Canada.

As a public speaker on important themes before intelligent audiences there is no one in America who outranks Macdonald. Seven times he has been called to address the Sunday Evening Club of Chicago! The sources of his strength are those of the great pulpit orator: intellectual power, a kindling imagination, trust in God. confidence in man, the courage of his convictions, and personal force and magnetism. He is a prophet, a truthteller, and no mere ecclesiastic: when he became an editor the "Reverend" gave place to the "Mr." or the "Dr." He resorts to no flippances or stylish devices, but grips his hearers by an irresistible appeal to their noblest impulses. "'Enrapt' is the word to describe the attitude of audiences of thousands of men who sit eager-eyed before this unprofessional, unperfunctory orator. The tense breathing. the unconscious murmurs of assent or emotion, testify to the marvelous sympathy which exists between speaker and hearers. . . The primal art, which cynics declare lost, of one man's ability to move the deepest passions of the many through the spoken word, belongs to this messenger of the great. elemental truths."

The title of Dr. Macdonald's baccalaureate address at Madison will be: "Internationalism and the University."

#### CASTALIA REUNION

THE Castalia Alumni Banquet will be held at six o'clock Monday, June fifteenth, in Lathrop Hall. Any alumnae desiring further information may write to Edna Frautschi, 623 E. Gorham St., Madison, Wis.

### THE UNIVERSITY OF WISCONSIN

As Seen by the Reminiscent Eyes of a Kid of 80 Summers By DR. LEROY GRANT ARMSTRONG, EX-'58

In accordance with our promise to bring reminiscent material regarding early Wisconsin days, we are glad to publish this time two such stories, by Dr. L. G. Armstrong and Judge Farlin Q. Ball, respectively. Dr. Armstrong came to Whitewater in 1845, and has been a resident of Grant County for 54 years.



URING the spring of 1854
I entered the halls of the
university, as a student,
for the purpose of pursuing my studies under the
tutelage of Dr. S. P.
Lathrop, who was then

Professor of Science, my purpose and object being the study of medicine. I came to the city of Madison by the first passenger train that entered the city, over the Milwaukee and Mississippi railroad—now the C., M. & St. P. R. R. The train was drawn by the engine "Madison" and pushed by the engine "Milwaukee," both being wood burning engines of very moderate size—about one-half the size of the present passenger engines. At that time the railroad ended here.

The university consisted of one building—the present North Hall. The number of students was from 60 to 100. The fourth story was the chapel, where we were compelled to congregate at six o'clock A. M. for the purpose of *listening* to prayer by one of the professors. At two o'clock P. M. we were all rounded up for rhetoricals, consisting of a declamation by one or two students, and a composition by another set of students. We were divided into two divisions, onehalf alternating with the other half. as to composition and declamation exercises.

The second dormitory building was erected during the two years I was in

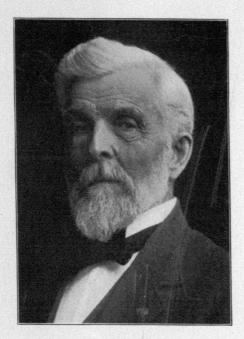
the school (1854 and 1855). In parenthesis let me say, the venerable David Wright was one of the carpenters who did the work. Whether as contractor or not, I do not know; he is at present a citizen of Madison.

In describing the university and its grounds, the present observer must divest himself entirely of all the present city of buildings, and recognize the fact that the 40 or 50 acres of grounds were at that time an oak grove, or grub patch, of white and black oak trees, in size from bush to a tree 15 feet high, all packed so close together that you could not through them-this all over the east half of the grounds. When you went up the hill, coming to the university, there on the west half were woodslarge oak trees, extending a long way back, far beyond where the Observatory now stands, for it had not been thought of at that time. The whole western landscape was a broad expanse of oak openings, dotted here and there with farms and farm houses.

On the south side of the hill was the Larkin brick house and farm, where we could get milk for our coffee (for we, many of us, boarded ourselves). The only way of getting down there was by following the footpath through the bushes.

The grounds were fenced on the east, south and west sides with a four board, and post, fence painted white

On the front side, at State street, was the main entrance, consisting of a carriage way gate, hung to swing two gates, supported by a frame of six inch square timber, about 12 feet high, and flanked on either side by a small gate for foot passengers—consisting of a turnstile.



DR. LEROY GRANT ARMSTRONG, EX-'58

From this main entrance, running directly up the hill, was the grand passageway. The grubs having been carefully uprooted, there was left a fine view of the high bald hillock or knoll on which now stands the Main building. From this highest point or knoll we have one of the finest land-scape views in this state.

Directly in front and to the east comes the capitol and city, and still farther away comes the pastoral resident country of Cottage Grove, or the Kanouse P. O. ten miles away. On the north and south are the unsurpassed views of Lakes Mendota and Monona, entrancing the eye with their

beautiful shimmer and sheen, putting a finishing touch upon one of the finest views in America.

Now don't you forget it, people both old and young came by the hundreds to enjoy the scenery. Here the young fellows met their girls, and on Sunday afternoons the whole hill was animation and fun.

Our athletics consisted largely of wrestling, boxing, foot racing, together with tight rope stunts performed on a two inch rope stretched between two large oak trees immediately behind and above the university building. It was here that the running gear of a double wagon some way got hung to a limb, 30 feet from the ground, and was attached by a chain to the end of a wagon tongue, where it hung suspended, swinging in the air for two weeks, to the surprise of the citizens of Madison, who indulged in all sorts of guesses as to how that wagon got from Muldoon's blacksmith shop up to the university. That tight rope disappeared for two weeks, and of course there was no good way to safely let the wagon down. Yet somebody finally came from town, and with block and tackle helped it to descend.

It is not my province or purpose to speak derogatorially of the city, the home of the great State University of Wisconsin. Yet all the same the fact exists, they had a brewery located about halfway between the capitol and the university. And a big board sign, 5x8 feet square, which adorned the side of the street, told of the good quality of the drink they made therein.

Like many other mysterious happenings, that sign was one morning found transcended to the chapel, and securely made fast with nails to a column in the immediate front of the faculty, where they each morning resorted to make sure of the future welfare of those good boys entrusted to their keeping, who seldom wandered around at night. Nevertheless, they did not escape from a warm lecture by Chancellor Lathrop, who took occasion to warn them that it was not dignified, and failed lamentably to show forth the fact that the faculty as a whole were putting forth their best efforts as to their minds in the way of soberness and good citizenship.

Since I have said the faculty, perhaps it will not be amiss to say who constituted such faculty. John H. Lathrop, A.M., LL.D., was the chancellor, and was supposed to guide and overlook the welfare of all concerned. He came from Missouri and was a most dignified gentleman. He walked with a gold headed cane which he always used while conducting strangers about the place, to point out all spots of interest.

Professor Sterling was the professor of mathematics. He was a fine mathematician, and a Christian gentleman, who often preached on Sunday at the Presbyterian church. This was not all of his good qualities, for they were many. He was a sprinter, of no slow step or small degree, as lots of the boys could truthfully testify after a speedy race through the trees of that grub-adorned thicket in front of the university, where they were sure to hike-when the professor had good reason to mistrust that they had a chicken secreted under their coat! Horrid, most horrid,-he fell over a stump, lost his gold spectacles, and yet he did not catch the good boy! Not that time. Ask St. Claire Botkin!

Professor O. M. Conover was professor of languages, and a most profound knowledge he had of Latin, of Greek roots and tenses, and of a corrected version of the Greek Testament. He, too, was a minister.

Yet he did have much regard for fine poultry. So he bought a high priced trio of new fangled Shanghai chickens. The rooster could easily eat corn off the head of a flour barrel, and those hens-they were beauties and much admired by everybody, and were a source of much pride to him and his friends, to whom it was his unalloyed pleasure to exhibit those rare birds. Vanity, vanity, saith preacher! Yet, horror of horrors, those fine hens disappeared one Saturday night. Many and awful were the maledictions called down upon the wretch who would steal and carry away those heathen Chinese chickens, and that, too, when they had received a Christian education, and their owner was a "prof." and a minister. Yet such was the case.

Now cheer up, for behind every cloud there are rays of sunshine and hope. After 50 hours of mourning comes Monday morning, and the disconsolate Prof. holds chapel exercises, and as usual, he enters his classroom, when lo! his large book case of books was nicely piled on top of the desk. He looks surprised, and opens the desk. Out hops a fine old hen, and in the most friendly recognition of her owner she salutes him with a loud coo-ko-doodle-do-sir, seating herself on the top of a chair.

"Mr. Coryell, will you go down and tell Uncle John to come up here." Of course, Uncle John came. Exit the Professor, with a hen under each arm, Uncle John in the rear, carrying the Big Shankhigh rooster. Of course the class suppressed any spirit of levity, and patiently awaited the return of the Prof. He did not scold. He was overjoyed, as was his family, to know they were the proud possessors of the first university educated trio of "Educated heathen Chinese hens."

Not least among the faculty was Tutor Carpenter. He was highly educated, and held down many places of usefulness. Neither was this all. He could and did offer up the most eloquent prayers, such that the good boys could not absorb or copyright. We were always glad when it came his turn to lead in chapel devotional exercises.

It is a shame for me at this time to speak in any other way than with the most profound respect of my preceptor. He was a most genial gentleman, a fine scholar and physician. Yet when it came to presiding in chapel, he was the most melancholy person imaginable. The good boys knew his prayers by heart. You can easily guess how things were! Dr. S. Pearl Lathrop was professor of chemistry and natural science. It was by this means that I came to recite with the first graduating class, Messrs, Wakeley and Booth, as we were mutually studying chemistry, botany, physiology and anatomy. Little Tutor Smith taught me the intricate paths of the Latin grammar and reader.

My medical education was ruthlessly disturbed by the death of Dr. Lathrop in January, 1855.

I completed my course at Rush Medical College. February 16, 1859, taking a full postgraduate course at the College of Physicians and Surgeons, New York City, in 1873-74.

As to my associates, T. D. Ranouse was my first roommate. My second roommate was S. S. Benedict. My

class was composed of A. C. Botkin, D. Powers, Mr. Gardner, and Sam Fallows, now Bishop Fallows. As a matter of fact, the smallness of our numbers gave us fine opportunity for intimate personal acquaintance.

I am pleased to call up in remembrance Messrs. Hayden K. Smith, who with T. D. Coryell could preside with much dignity over our moot courts and discussions, J. M. Flower, Dan Tenney, Dick Hubbell, and Hanson, who could play lawyer to perfection. When it came to sanctimonious airs, don't leave out S. S. Benedict and T. D. Kanouse nor Sid Foote. They sustained the dignity of the university.

The Athaenean and Hesperian societies were the pioneers,—and fine work they accomplished. They both claimed that they were the great and only source of profound wisdom.

The meetings of both societies occurred on Friday night. Did they disperse and go quietly to their rooms? I am afraid they did not; quite as likely, they sent a delegation to the basement (furnace room) to interview Uncle John, the janitor; for, you know, he held imperial sway and carried the keys. These they must get possession of for a time, long enough to rush up to the recitation room of Prof. Sterling, unlock the door, and hurry back with the key, for that delegation could not amuse Uncle John all night with funny antics and stories. The professor's stove had two openings—to fry oysters, or chicken, boil coffee, eggs, etc., etc., just the thing! Blind the windows and you were ready to hold forth until midnight! What lots of fun and frolic!

The library had 500 volumes of the greatest variety. It was installed in a small room, 8x8, in the fourth story, off to one corner, at the end of the

The committee of mysterious happenings were the incomparably great George W. Stoner, Dick Hubbell, Sid Breeze, Hughes, St. Claire Botkin, Hansen, and Bug Slaughter,—together with the whole bunch, liable to immediate draft; no excuses avail-

able. We had no women students.

Thus as one of the good boys, I have indulged in a few of the inevitable happenings of 60 years since, for the edification of the twentieth century university students.

Boscobel, Wisconsin.

#### REMINISCENCES OF EARLY DAYS

By FARLIN Q. BALL, '61



HEN I came to the university in March, 1857, the faculty consisted of Chancellor Lathrop and Professors Sterling, Conover, Read, Kursteiner, and Carr. Not a large teach-

ing force, it is true, but to the students they stood 100 in scholarship, and were nearly perfect in deportment.

Chancellor Lathrop was a warmhearted man, liberally endowed with common sense and natural ability, two qualities which, more than all others, move the world. We loved him for he was good to us. I well remember my coming. I rode 40 miles in a wagon through a snowstorm from Monroe in Green County, reaching Madison after dark. I slept that night in the old American House on a sofa, as prior comers had pre-empted all the beds. In the morning, after a lonely walk to the university (I was the first student from our part of the state), I was shown his office, and entering found him in, and told him why I came. In a few moments he put that green village boy at his ease; and in the years that followed that boy never wavered in his affection for, and his loyalty to our courteous master.

In 1861 nine men were graduated. This was the largest class that had been sent out up to that time. It was not exceeded in number until eight years later. At the date of our semicentennial, of the nine four were dead: Britton, Gillette, Spencer and Henry Vilas. The living were: Church, Hall, Leahy, J. D. Parkinson, and myself. Five of our number were in the Union army. Two of us, Hall and myself, were present at the reunion. The other three were unable to come.

In 1857 there were but two buildings on the Hill,-the North and South Halls. The North Hall, except the upper floor, was used by students as a dormitory. Carpets were almost unknown, and only the very elect had curtains at the windows. Most of the recitation rooms were in the South Hall. The faculty also lived there. Part of the lower floor was used as a messroom, or common, to which those of us who could afford to pay \$1.75 per week, were admitted. As we had no collaterals we were obliged to pay cash for what we ate, but we were permitted to sleep "on tick."

While the annual enrollment was greater, the average attendance did not exceed 200; one-half of whom were in the preparatory department. We were healthy, red-blooded, and good—part of the time. We were not as were some of the later classes (I



JUDGE FARLIN Q. BALL, '61 Picture taken Fifteen Years Ago

speak from rumor only) composed entirely of divinity students. But we rarely did a mean thing, and our excesses were the bubbling over of animal spirits only.

As a whole we were poverty poor.

I do not think there were ten dress suits in the entire outfit. If there were any others they never dazzled my eyes. When the rest of us wanted to change clothes we first went to bed, or we traded with each other.

Our sports were few. We played town ball, and a game called wicket. We jumped and we wrestled. Depending from one of the oak trees that then stood between the dormitories and the corner of the hill was a pair of swinging rings. This was our gymnasium. Almost every evening we walked to and from the postoffice, then situate east of the capitol. I have not examined the almanac, but it must be that the days were shorter then than they are now, for we had but little time to play, while now—"but that is another story."

These petty details do not put us on a very high plane; but out of that bunch of 200 students came our venerable Vice-President (we called him "Big Park"), Senator Vilas, Senator Spooner, Senator Nelson, Muir the naturalist, Alex C. Botkin the editor, Bishop Fallows, James L. High the law writer, General O. H. La Grange, and a half a dozen judges of courts of general or of appellate jurisdiction. If any succeeding four years with its tenfold numbers has made a better showing, I have not seen the record.

#### CLASS OF 1909 REUNION

#### STRAY EFFUSIONS BY THE PUBLICITY COMMITTEE

COME of the folks, like "Bugs" D Burgess, Charlie Pearce and Marion Peabody, who were always writing prize essays and songs, put on your thinking caps on the train coming back and write a dozen or two verses to some good snappy popular tune, with which we are to make our presence known at the alumni dinner. Better still, go out under the stars some night and manufacture an effusion. Send it to Amy Comstock, care State Journal, Madison, Wisconsin, or to Charles A. Mann, 2141 West Lawn Avenue, Madison. Come across. Don't leave it to some one else; he won't do it.

Remember the big day—June 15. Mark it on your calendar in red ink; wear your tie wrong side out until you come back; give the kids all ex and remember '09 is celebrating this year. Don't let anyone else forget it; talk it; sleep it; eat it. Come all week, large doings. Your senior "case" is probably "wedded in haste" but there's always someone else's girl you can take to the alumni ball Tuesday night. But don't forget June 16.

A most horrible crime was committed back in Madison, Wisconsin, the other night, one which the local police seem unable to solve. Some valuable papers, in the possession of one Frederick S. Brandenburg, were mysteriously spirited away from his pri-

vate office where these same papers had been carefully placed under lock and key in his reenforced Mosler safe. Mr. Brandenburg is greatly concerned over the loss of these papers, particularly one for the safe return of which he is willing to pay generously. A copy of same is printed below:

"April 25, '14.

"Dear Heggie:

"Enclosed please find my donation. You realize the importance of life insurance—to relatives—to me these five bucks, dollars, cash, money, mean life insurance for myself, an insurance not in case of death, but to prolong life. The reunion of 1909 will no doubt add years to the life of all who attend and my intention is to be among those present if possible. This accounts for the promptness with which I part with real money.

"It has always been my proudest boast that I graduated with the illustrious class of 1909 in the allotted period of four years and no summer schools, and my only regret is that I must return to the glad reunion without an entry in the baby contest. Be assured of this, however, Heggie, I am not downhearted. Though I have known upwards of a million among the fair sex who lack good judgment I still have hopes.

"It is with great pride that I note that I am selected as chairman of the stunt committee. But such a committee! Mrs. Kieckhefer will insist upon her constitutional rights, Leo will no doubt have a speech prepared, and Theodore, Jr., will probably remark incessantly that 'there's just time to spear one before we eat.' What chance have I?

"P. S. I once wrote a letter to that foolhardy Lochner. He published it. This effusion is for thou alone. In case I have anything to offer the public it will come after correspondence with the Messrs. and Mesdames above."

Mr. Brandenburg is very anxious that this material should not get to the press. We are glad to take this quiet means of helping Mr. B. to recover this document before he will be called to account.

Is ou tumin' back to our first birth-day party? I heard "Cookie" tell the "cop" (the one that used to skip out when those big boys they called Doc and Sid had one of their parties on the libe steps) that there was going to be a whoppin' big cake, all frostin', that would make your mouth water like a cloud burst and just one enty-wenty candle for the first '09 reunion.

Nurse said she heard the butler say that the master said he heard that just slathers of those '09ers (whatever that is) were coming back. They had such funny names. There was "Jumbo," wonder if he is the elephant in this show; some one said they needed him to help carry the baskets for the picnic. Guess he must be. Then there was "Spec" somebody or other. This must be going to be a regular circus with elephants and Lilyputhians. "Cookie" told me the other day that she heard "the missus" raving over some one that was coming back. She called him "Mike" and said what wonderful eyes he had but how he would never look at any of the girls and they were all so crazy about him. Someone from Milwaukee, she said.

She said some Count (he must have been) would surely be here; anyway he was Ferdinand von ---. My, but I should think the girls would be crazy about him. Who's Ernst, I wonder, someone from Germany, I suppose. There seemed to be a lot of "foreigners" coming, Lona from Tokyo, and "Red" Rightor, Standard Oil magnate from Siam. There must be going to be some wonderful people there. One from the House of Representatives, the Honorable Edwin Witte, such an honor for one so young. But there was one that sounded awfully nice to me; they talked about brass buttons and military drill; they called him Lon. I guess he must be wonderful. I'm glad I am going to be there. Nell Murphy said I\_ might come if I'd be good and let her do the talking.

I just can't wait until June 15th.

There's another and bigger reason for coming back this June than the mere fun of meeting old classmates and others. There is a lot of ignorant criticism afloat about the cost of the university and assertions are constantly being made which can be disproved by a well-informed alumnus. Commencement week ought to be a kind of continuation school for the alumni of the university in which they can find a deeper enjoyment by fitting themselves to be of real service to the university, by educating the state by being centers of correct information. Wisconsin men and women, and especially '09ers, will come back for this last as eagerly as for the cementing but often thoughtless pleasure of reunion.

## EDITORIAL

#### TO THE REUNION CLASSES

NOTICE is hereby given to the executive committees of the various reunion classes that they are expected to provide two absolutely original, never-before-enacted, surpassingly funny stunts on All-Alumni Day, Tuesday, June 16. The first of these is to be perpetrated during the All-Alumni Dinner in the Gymnasium at noon, and is to relieve the tension of post-prandial oratorical pyrotech-

nics as well as facilitate the digestion. The second is to be staged during the All-Alumni frolic in the afternoon on the Upper Campus, when the assembled multitudes of returning grads and ex-students will make merry on the greensward between Music Hall and the Law Shop. Any reunion class failing to produce a stunt will be relegated to the Alumni Cemetery directly west of the capitol-dome-junk-heap.

#### THE GET-YOUNG-AGAIN PROGRAM

For the benefit of the fossilized alumnus who has been so steeped in the chase after the almighty dollar that he has missed all those enthusiastic stories on the prospects for "the best reunion ever" that have graced this magazine of late, we herewith repeat, in their barest outline, the events thus far scheduled.

Sunday, June 14, at 4 o'clock. Baccalaureate address by Dr. James A. Macdonald of the *Toronto Globe*, one of Canada's most brilliant orators and most profound thinkers.

Monday, June 15. In the morning every train will bring hundreds of members of the classes ending in '4 or '9, who are returning for their quinqennial reunions. Most of the classes will have special headquarters, notices concerning which will be posted at the general Alumni Headquarters in Music Hall. Don't fail

to register at Music Hall. You will meet all your friends there; you will find comfortable rockers and other conveniences; and, above all, you will be relieved of the alumni dues of Two Dollars.

In the afternoon the various reunion classes will have their class picnics, while the graduating class will entertain those who come to the Gymnasium with an interesting Class Day program.

In the evening it is your privilege to see the seniors behind the footlights, and afterwards to howl like an Indian at the pipe of peace ceremony on the lower campus.

Tuesday, June 16. Get up early and boil down to one minute the speech that you want to get off at the annual business meeting of the Alumni Association in Music Hall at 10 A. M. Take part in the Monster Pa-

rade at 9:30. The band will be there, also howling mobs of reunionists. More paying of dues. Election of officers and other incidental functions. See the special "Announcement Extraordinary" elsewhere in this issue.

12:30 noon. No such alumni dinner was ever held as that which will be staged on Tuesday, June 16. Yelling, singing, stunts, after-dinner stories—what more can you want? The inimitable Julius E. Olson, '84, will again be grand marshal of the parade and will lead the singing.

In the afternoon everybody will congregate on the beautiful lawn between Music Hall and the Law Building to see the old boys cut capers at an improvised vaudeville show.

In the evening you will get a chance to ask your old-time sweetheart to dance with you. They've put the Alumni Reception and Ball on Tuesday night instead of Wednesday as formerly, because they want you to take it in and have a good time; so don't miss this opportunity to look your prettiest.

Wednesday, June 17. The grand climax of it all will come, for the seniors at least, on Wednesday, when they get their long expected and eagerly awaited sheepskins and Prexy dismisses them with his fatherly advice. Stay over for the Wednesday exercises if you possibly can, fellow graduate; it will be more than worth your while.

Meet Prexy at his home between 4 and 6 o'clock in the afternoon. He will be tickled to death to see you.

#### PROPOSED AMENDMENT

In accordance with the provisions of the constitution, that all amendments proposed thereto shall be published in The Alumni Magazine at least ten days before the meeting of the Association, notice is hereby given of the following amendments to Article III of the constitution:

Section 1 to be amended by striking out the words "graduate of" and substituting therefor the words "person who has satisfactorily completed one year's work at"; so that the whole

section shall read as follows: "Any person who has satisfactorily completed one year's work at the University of Wisconsin may become a regular member of this Association by filing with the secretary an application for membership in such form as the Association may by its by-laws require, such application to be accompanied by the payment of dues for the fiscal year within which the application is filed."

Section 4 to be dropped.

#### CHICAGO FROLIC

On May 15, an extremely successful May party and dance was given by the Chicago alumni and alumnae

at the Wilmette Country Club. About 140 Wisconsin men and women attended, and had a delightful time.

# THE WISCONSIN ALUMNI CLUBS

#### A WASHINGTON STATE BRANCH

That a state branch of Wisconsin alumni residing in Washington is about to be launched, appears from the following letter sent out by Marshall K. Snell, '81, president of the Wisconsin Alumni Association of Tacoma:

May 8th, 1914.

To all Alumni and Former Students of the University of Wisconsin, Greeting:

We feel that the time is ripe for the organization of a University of Wisconsin Association for the State of Washington, not only for the social pleasure and benefit to be derived, but that unitedly we may take a part and wield an influence in the educational interests of this our adopted state, and impress thereon something of the spirit and ideals of our Alma Mater.

To this end, we propose that the annual basket picnic be a state-wide Get Acquainted Gathering, to which you and your family, children included, are invited, to be held at Point Defiance Park, Tacoma, Saturday, June 6th, 1914, meeting at or about 12 o'clock, noon, at the Park waiting room. Arrangements have been made for tables at the Pavilion prepared in readiness for the spread which will be held at 1:30 P. M. sharp. No dishes or tableware need be brought. Coffee will be furnished and served. Those coming from long distances will not be expected to bring lunch baskets. The park will be found replete with attractions and amusements to insure a carefree playday for old and young. There'll be fun on tap all the while—races and games for the youngsters, a real zoo full of animals and birds, a fine beach, acres of flowers and miles of woods.

While assuring you of a good time, we ask your cooperation in the more serious purpose of the gathering, namely, for state organization. Heretofore the Seattle Association of Wisconsin Alumni has entertained our university members irrespective of locality, but for some time past the suggestion of a wider organization has been discussed, an organization which our numbers now warrant, and in which all former students as well as alumni should be joined, and every locality in the state represented.

Come prepared to help decide matters of detail in organization such as definite objects, officers, representation of various localities on boards, the appointment of a committee on education, the advisability of holding two yearly meetings, one a formal dinner in the winter, and the other a family picnic in the summer. Tentative articles of association and bylaws will be submitted for consideration. and a roster ready for signature of those present.

We have issued these invitations from the latest record furnished by the Wisconsin University Alumni Association. and ask that you supplement same by furnishing us with the name and address of any university alumnus or student in your locality omitted by us, or of whom you may know as having recently come to the state.

Kindly notify our secretary—Mrs. Florence Baker Hays, 3211 No. 31st

St., Tacoma.—of your acceptance, and in any event let us hear from you with your views on the proposed organization.

Come! Put care aside; break bread and play with us awhile.

Fraternally yours,
MARSHALL K. SNELL,
President.

#### SIOUX CITY ALUMNI BANQUET

The Wisconsin Alumni Association of Sioux City, Iowa, which has been in existence since 1904, held its annual banquet and business meeting at the Martin Hotel on the evening of May 15. Twenty-seven enthusiastic alumni and former students of the university met early in the evening in the reception hall of the hotel for a social hour before the dinner. William Bertke, '02, vice-president of the association, acted as toastmaster and introduced as the first speaker Professor Wallace Carson of Morningside College. Professor Carson, who has been recently in touch with university affairs in Madison, gave an inspiring talk on "The University and the Alumni." There are 10,600 alumni; the chief characteristic of the impress received by these graduates, in Professor Carson's opinion, is the importance of the scientific search for truth. Professor Carson concluded his remarks by saying that the alumni honored themselves in honoring their Alma Mater. Miss Clarice Lytle, an alumna of Northwestern University, spoke of the affection that the adopted sons and daughters felt for Wiscon-Her topic was "The Summer School." The size of the summer school in 1913, and the breadth and the scope of the courses offered, was a revelation to the older alumni. Miss

Jeannette Drake gave a short history of the growth and development of the Library School. The practical nature of the instruction in this department was emphasized; theory and practice go hand in hand when members of the staff of the Library Commission are instructors in the school.

The retiring president of the association, Mrs. H. J. Taylor, '85, responded to the toast, "Wisconsin Past," and carried the company back to the early days of the university. As she told of the earlier leaders, she made the names, Sterling, Chadbourne, Bascom, Lathrop and others more than mere words carved in stone over doors of university halls, but names to be revered by the present generation, because the University of Wisconsin has grown great through these men who gave themselves in service to the institution they loved. Mrs. Taylor said also that the alumni owed a debt of service to the university in payment for all it had done for them; not only must they be proud of the university, but the university must be proud of them.

Mrs. Rudolph M. Anderson in the talk on "Wisconsin Present and Future" spoke of the size and strength of the university of today, and the place its faculty and alumni are taking in state and also in national af-

fairs, ever with the ideal of service for humanity as the watchword and guide.

The officers elected for the coming year are: Wilbur Derthick, '10, president; Mrs. Sam Page, '02, vice-president; Mrs. Rudolph M. Anderson, A.M. '10, secretary and treasurer.

A motion was carried that the secretary be instructed to subscribe for The Wisconsin Alumni Magazine out of the funds of the association, that a file of this magazine may be kept

in the public library, where high school students and others may have easy access to its pages. The secretary was also instructed by the president to inform herself as thoroughly as possible in regard to affairs of interest to prospective students of Wisconsin.

The meeting was adjourned for another year, every alumnus and student present leaving with renewed enthusiasm and loyalty for the University of Wisconsin.

Mrs. Rudolph M. Anderson, '10.

#### ANNOUNCEMENT EXTRAORDINARY

A ND now the movie man. The class of '04, through the generosity of a special friend of that illustrious class, will have a movie man in its midst for two solid days,—Monday, June 15, and Tuesday, All-Alumni Day. Wherever throughout the length and breadth of this land people gather at nickel shows, scenes of the 1914 Commencement and of the Wisconsin campus will be visible.

One of the features to be photographed is a monster parade at 9:30 A. M. Tuesday, just preceding the annual business meeting. The class of '04 is anxious that all returning graduates and former students take part in this parade, and come adorned in all the regalia that their various classes can produce. The seniors will be expected to appear in cap and gown. There will be wild animals, floats, and other disturbing elements.

It should be added that on Monday night, at the pipe of peace ceremony, the '04 crowd will shoot off about \$150 worth of fireworks, in addition to the hot air that will otherwise characterize their reunion.

#### IMPORTANT REUNION NOTICES

#### NOMINATING PETITIONS

NOTICE is hereby given that a nominating petition has been received at the Alumni Headquarters, signed by the requisite number of members of the Alumni Association (ten) prescribed by the constitution, for the nomination of Ernst von Briesen, '00, of Milwaukee, to succeed himself as president of the Association.

No other nominations have been received nor have any been filed

for the office of vice-president and recording secretary.

#### REUNION OF '84

THE following letter has been sent by Justice A. J. Vinje to all the members of his class:

Dear Classmate:

The class of '84 is to have a reunion at Commencement, June 15-17, next. It is planned to have a dinner at the Maple Bluff Golf Club on Monday, June 15, at one o'clock in the afternoon. Members are requested to meet at my house, 412 N. Carroll Street, between eleven and twelve o'clock in the forenoon. You are earnestly requested to be present at this our thirtieth commencement anniversary.

Please notify me on enclosed card if you can come.

Sincerely yours, A. J. VINJE, In behalf of Committee.

#### '94 LAW REUNION

THE law class of '94 is planning on a reunion on Tuesday, June 16, and expects to have back about thirty-five members. A committee consisting of Clarke M. Rosecrantz, Majestic Bldg., Milwaukee, L. A. Williams, Fond du Lac, A. E. Buckmaster, Kenosha, B. C. Parkinson, Madison, C. E. Whelan, Madison, and Herman L. Ekern, Madison, is in charge of the arrangements. For further information apply to Herman L. Ekern, Commissioner of Insurance, Madison.

#### WISCONSIN-CORNELL FIELD DAY

ON Friday, June 26, the day of the Poughkeepsie Regatta, the alumni of Wisconsin and Cornell residing in Chicago and vicinity will hold a joint Field Day at one of the suburban golf clubs. There will be golf, baseball, and other sports. One feature will be a tug of war over a pond, the losers to be treated to a ducking in the cooling waters of said remnant of Noah's flood. There will be a joint dinner during which the returns from the Hudson will be received, and much yelling and more story telling. It is expected that at least three hundred men will participate. Wisconsin grads who can be in Chicago at that time are cordially invited to participate. For particulars address any of the officers of the U. W. Club of Chicago, 230 W. Washington St.

## ENGINEERING ALUMNI DIRECTORY

THE following is a reprint of the Directory of Graduates of the College of Engineering, recently published by the university as Bulletin No. 648 (General Series No. 460). As was explained in an earlier issue of this magazine, the Directory is largely the work of Professor R. C. Disque, '03, in cooperation with the Alumni Headquarters. While every 'varsity engineer whose name is listed below has been mailed a copy, yet we believe the information to be of great interest also to Wisconsin alumni who are not graduates of the College of Engineering. For this reason we are glad to reprint in a regular issue of The Wisconsin Alumni Magazine, even though it necessitates our omitting the regular Alumni News section.

#### INTRODUCTION

This booklet represents our second attempt to publish a reliable alumni directory of the College of Engineering. Needless to say, it has been no small task to collect and arrange the information; but it is believed that the usefulness of the directory abundantly justifies the work involved on our part and the trouble of responding to frequent calls for information on the part of the alumni. We intend to publish the directory regularly every two years and not allow it to languish, as such work is very apt to do; but we must count on the active co-operation of the alumni themselves, not only in responding faithfully to our calls for data, but in voluntarily keeping us informed of their changes and the changes of others. It is a small matter to mail us a card when you change, but it may save us much trouble and expense in finding your address.

We have arrived at a method for cooperating with the General Alumni Department of the University so as to relieve our alumni of the trouble of answering repeated calls for information, as well as to reduce the trouble and expense involved in collecting and arranging that information.

In June of each year each alumnus will receive from the Alumni Headquarters a commencement invitation and with it a postal card for giving us the desired data. Those who return this card will not be troubled again until the next June, but those who do not will receive from us a second request with our alumni news letter, which appears in September of each year. Those who do not respond to this second request will receive repeated requests thereafter until they do respond. The percentage of those answering our first requests is steadily increasing, until it has now reached a very satisfactory mark. We earnestly request you to do your part in raising the percentage and thus lightening our work.

We have the equipment for doing the work. We are furnishing the labor and the means. Your part is only to return the card in June and to keep us informed when you change. Will you do it?

Suggestions concerning methods of making the directory more useful or more convenient will be thankfully received.

Very sincerely yours, F. E. TURNEAURE, Dean.

#### EXPLANATION OF SYMBOLS

A small letter followed by a numeral indicates the bachelor's degree and the year when that degree was conferred. single capital letter indicates the professional degree for completion of the five year course. Double capital letters indicate the professional degree for graduate work or experience. For example:

c '97 indicates Bachelor of Science in Civil Engineering in the four year course,

conferred in 1897.

E '10 indicates the degree of Electrical Engineer in the five year course, conferred in 1910.

M. E. '01 indicates the degree of Mechanical Engineer for graduate work or experience, conferred in 1901.

\* indicates deceased.

† indicates second degree to graduate of college other than Wisconsin.

§ indicates honorary degree.

#### DIRECTORY

Abbott, C. E., g '01 C. E. '05. Superintendent, Iron Mines and Quarries, Tennessee Coal,

Iron and Railroad Co., Bessemer, Ala.

Abbott, E. P., c'08. With Guthrie McDougall
Co., Contractors, Spokane, Wash.

Adams, B. C., e'03. General Manager, Spokane

Gas and Fuel Co., Spokane, Wash. Adams, B. F., m '02. Traffic Manager, Art Bedstead Co., 37th and Rockwell Sts., Chicago, '11.

Adams. W. K., c'03. Bridge Engineer, National Railways of Mexico. Colonial Station Mex-

ico, D. F.
Adamson, W. H., c'86. Civil Engineer, Portland, Ore. Residence: 1326 Garfield Ave.
Ahara, E. H., c'92, M. E. 96. General Superintendent, Dodge Mfg. Co., Mishiwaka, Ind.
Ahara, G. V. m'95, M. E. '96. Manager, Canadian Shops Fairbanks, Marse Co. 864 Dovercount

Road, Toronto, Ontario.

Ira, T. H., m'00. Chief Inspector Acme Harvester Co., Pekin, Ill.

Alaniva, C. R., min '13. Engineer, Great Northern Iron Ore Properties, Rovey, Minn. Home: 304 S. Bleeker St., Lead, S, D.

Albers J. F., c'77. Pre Bank, Antigo, Wis. President Langlade National

Alexander, J. F., e 11. Salesman, Wagner Electric Co., Room 912, 30 Church St., New York City.

Alexander, Walter, m '97 M. E. '98. District Master Mechanic, C. M. & St. P. Ry., Milwau-

kee, Wis. Algeo, H. L., c'13. Chief of Field Party, In-diana Steel Co., Gary, Ind. Home: 4050 Ken-

more Ave., Chicago, Ill.

Allen, Andrews, c'91, C. E. '97. President, Allen
and Garcia Co., 934 McCormick Bldg., Chi-

cago, Ill.
Allen. C. H., m'10. Engineer, International Pa-

per Co., Livermore Falls, Me.
Allen, J. S., e '97. Manager, Equitable Electric
Light Co., Lake Geneva, Wis.

M. E., c'06. Contracting Engineer, Central States Bridge Co., Indianapolis, Ind.

\*Almond, F. C., e '04. Deceased.

Alverson, H. B., e '93. Superintendent, The Cataract Power and Conduit Co., 200 Electric Bldg., Buffalo, N. Y. lerly, H. M., c'11. Rock Island, Ill.

With U. S. Engineers,

Anderson, A. E., m'03. General Manager, Laramie Electric Co., Laramie, Wyo.

erson, E. A., e '13. With National Lamp Works of General Electric Co., Nela Park, Anderson, E. Cleveland, O.

Anderson, G. A., m '02. Anderson, V. R., m '08. Western Representative,

Dominion Fireprooning Co.,
Calgary, Alb., Can.
Anderson, Walker, E. E. '13. Testing Dept. General Electric Co., Schenectady, N. Y.
Andrews, A. W., c'05, C. E. 12. Office Engineer,
C. B. & Q. R. R., Lines West, Room 14, C.
B. & Q. Depot, Lincoln, Neb.
Andrews, W. C., ch'10. Department Manager, B.
F. Goodrich Rubber Co., 96 Byers Ave.,

Arron, O.

Anger, B. F., m'05. Automobile Engineer. 303
16th St., Milwaukee, Wis.

Ankeny, S. H., c'12. In charge of publicity,
Greater Dayton Association.

Anthony, R. B., e'07. Pittsburg Manager, The
Bristol Co., 1670 Frick Bldg., Annex, Pitts-

Bristoi Co., 1816.
burg, Pa.
Arms, R. M. e '94. Engineer, Pacific Tel. and
Tel Co., 931 Henry Bldg., Seattle, Wash.
Arndt, R. F., m '07. Secretary. Northwest Steel
Co., 420 N. Front St., Portland, Ore.
Arnold, L. G., c '09. City Engineer, Chippewa

Aston, Jas., e '98. E. E. '09. Assistant Professor of Metallurgy, University of Cincinnati, Cincinnati, O. Austin, E. W., e '09. Assistant Engineer, Wag-

ner Electric Co., 26 Cortland St., New York

City.

Austin, W. A., m '99. With Underfeed Stoker Co. of America, 1807 Harris Trust Bldg., Chi-

Bachelder. C. H., m '01. Manager, Whitehouse Barrel Co., Hastings. Fla.

Badger, A. H., e'12. Testing Dept., Electric Co., Schenectady, N. Y.

Baehr, W. A., c '94. Consulting Engineer, People's Gas Bldg., Chicago, Ill.
Bailey, H. E., e '03. Instructor in Machine De-

sign, Los Angeles Polytechnic High School, Los Angeles, Cal.

Baily, R. W., m '07. M. E. '10. President and General Manager, Interstate Mfg. Co., Olkaloosa. Iowa.

Bainbridge, Walter, ch '13. Chemical Engineer. American Bottle Co., Newark, O. Home: 126 Hudson Ave., Newark, O.

Balch, J. W., c '09. 604 W. Main St., Marshalltown, Ia.

R., c '05. C. E. '09. Civil Engineer with Balch, L. D. W. Mead, Madison, Wis.

Baldwin, G. W., c'85. President, Baldwin Lumber Co., Crete, Neb.
Ball, E. M., g'09. Superintendent Ishkooda Iron Mines, Tennessee Coal, Iron and Railroad

Mines, Tenuessee Coa, Co., Bessemer, Ala.

Ball, W. C., e '11. Assistant Engineer Associated Oil Co., Gaviota, Cal.

Ballard, R. F., m '13. Mechanical Designer, Riter Conley Mfg. Co., Pittsburg, Pa. Home: 171

21st St., Milwaukee, Wis.
Ballschmider, A. L., e '10. Inspector, General
Electric Lamp Co., Newark, N. J.
Balsley, H. E., c '09. Agent, Contracting Dept.,
American Bridge Co., Wolvin Bldg., Duluth,

Minn.

Balsom, A. P., e'06. Traveling Salesman, 105-107 N. Canal St., Chicago, Ill., Bamford, F. E., m'87. Captain, 28th U. S. In-

fantry, Army Service Schools, Ft. Leaven-worth, Kan. Permanent address: Adjutant General, U. S. Army, Washington, D. C. Bandli, E. M., c'09. Junior Topographer, U. S. G. S., Bridal Veil, Ore.

Barber, E. L., e'04. Equipment Engineer, Southwestern Bell Telephone System, St. Louis, Mo.

Barclay, A. J., c'12. Graduate Student, University of Wisconsin, 1105 University Ave., Madison, Wis. Home: 359 Park St., Elgin, 111.

Barker, C. P., g '07. Dairyman and Stock Raiser, R. F. D. No. 7, Chippewa Falls, Wis. \*Barker, H. J., c '07. Deceased.

Barkhausen, L. H., m '01. Contractor, Green Bay, Wis.

Barnes, C. B., m '00. Mechanical Engineer, Western Electric Co., Hawthorne, Ill.

Barr, J. M., m '99. President and General Man-

ager, Metal Products Co., Waterloo and Detroit Terminal R. R., Detroit, Mich.

Barth, J. H., c '11. Draftsman, C. M. and St. P.
Ry. Co., Railway Exchange Bldg., Chicago, Ill.

Bartlett, C. L., c 10. Draftsman, Milwaukee Northern Railway, Milwaukee, Wis. Basset, W. B., e 09. Commercial Engineer West-

inghouse Electric and Mfg. Co., Pittsburg, Pa.

Bassett, H. S., c'71. Attorney at Law, Preston,

Filmore Co., Minn. Bates, F. E., c'09. C. E. '10. Engineer of Design, Missouri Pacific Ry., Missouri Pacific Bldg., St. Louis, Mo.

§Bates, Onward, C. E., (hon), '97. Consulting Engineer, 3325 Michigan Avenue, Chicago, Ill.

Bates, W. E., c'06. Chief Engineer, Chisholm District, Oliver Iron Mining Co., Chisholm,

Baus, R. E., m'00. Assistant Production Manager, Studebaker Corporation, Detroit, Mich.

\*Beardsley, F. C., c'83. Deceased. Beasley, P. W., c'10. Assistant Engineer, Tu-

malo Irrigation Project, Laidlaw, O. Beasley, W. H., e '08. In piano business, Texarkana, Ark.

Bebb, E. C., c'96. Engineer. U. S. R. S. Washington, D. C.

Bechlem, A. W., e '07. Electrical Engineer, Isthmian Canal Commission, Culebra, C. Z.

Becker, D. B., ch'13. Merchant, Ft. Atkinson,

Wis. Home: Ft. Atkinson, Wis.

Becker, J. W., c'09. C. E. '10. Sales Engineer,
Weber Chimney Co., 1452 McCormick Bldg., Chicago, Ill.

Beebe, G. A., c '13. Instructor in Civil Engineering, State College, Pa.

Beebe, H. M., c'11. Draftsman, The Link Belt Co., 39th St. and Stewart Ave., Chicago, Ill. †Beebe, J. C., C. E. '10. Engineer, Idaho Irrigation Co., Richfield, Idaho.

Beebe, M. C., e '97. Professor of Electrical Engineering, University of Wisconsin, Madison, Wis.

Beitel, R. M., e'09. Equipment Engineer, Western Electric Co., Hawthorne, Ill. l, G. W., e'09. With Natwick Electric Co.,

Marshfield, Wis.

Belling, J. W., e '03. Railway Engineer,
Belling, J. W., e '04. State St. Boston.

eral Electric Co., 84 State St., Boston, Mass. sky, C. J., e 10. E. E. '12, Instructor in Electrical Engineering, University of Penn-sylvania, 3405 Chestnut St., West Philadel-Belsky, phia, Penn.

phia, Penn.

Bendt, J. P., c'13. Field Manager, Coke Oven
Construction, Semet Solvey Co., Indianapolis
Gas Co., Indianapolis, Ind. Home: 464 S.
Congress St., Kenosha, Wis.

Benedict, G. A., e'07. Superintendent of Schools,
Phillips, Wis.

Benedict, W. J., m'04. Secretary, City Improvement Activities. 204 W. 13th St., New York
City.

City.

Bennett, A. E., c'10. Crandon, Wis. Home: 102 S. First St., Aberdeen, S. D. Bennett, B. F., ch. '10. With American Sheet and Tin Plate Co., 1302 Frick Bldg., Pittsburg, Pa.

Bennett, C. E., m'12. Inspector, State Insurance Dept., Madison, Wis. Bennett, C. W., m'92. With American Sheet and Tin Plate Co., 1302 Frick Bldg., Pittsburg, Pa

Benson, F. H., c '91. Invalid. Abilene, Texas or

Tucson, Ariz.

Bentley, F. W., m '98. Assistant Turbine Engineer, General Electric Co., Schenectady, N. Y.

R. Y.
Berg, John, c'05. C. E. '10. Civil Engineer, 220
S. Michigan Avenue, Chicago, Ill. Res: 740
N. Lotus Ave., Austin, Chicago, Ill.
\*Berg, W. C., c'02. Deceased.
Bergenthal, V. W., e'97. E. E. '98. Assistant
Sales Manager, Wagner Electric Mfg. Co.

Sales Manager, Wagner Electric Mfg. Res.: 15 Thornby Place, St. Louis, Mo.

Berry, Claude, c '01. Chief Engineer, Darbyshire-Harvie Iron and Machinery Co., El Paso, Texas.

Berssenbrugge, B., e'10. Engineer, mer Mfg. Co., Milwaukee, Wis. B., e '10. Engineer, Cutler-Ham-

Bertke, W. A., e '06. General Superintendent, Gas Dep't, Pacific Light and Power Co., Spaulding Bldng., Portland, Ore.

Bertke, W. J., e'03. Engineer, Sioux City Gas and Flectric Co., Sioux City, Ia.

Bertles, W. M., g '09. With Hilliker, Bertles Co., Investment Brokers, Grand Rapids, Mich.

Bertrand, P. A., e'95. General Manager, Gray's Harbor Railway and Light Co., Aberdeen, Wash.

†Betts, C. A., C. E. '13. Graduate Student, University of Wisconsin. 803 State St., Madison, Wis.

Best, P. B., e 12. With Central Group Bell Telephone Cos., Chicago, Ill.

Bickelhaupt, C. O., e'11. Commercial Engineer, American Telephone and Telegraph Co., 15 Dey St., New York City.

Bickelhaupt, V. W., min'11. With Des Moines Bridge and Iron Works. Res: 114 Ewing Apt., Des Moines, Ia. Biefeld, Paul, e '94. Ph. D. '00 Univ. of Zürich.

Director, Director, Swasey Observatory, University, Granville, Ohio. Denison

Biegler, P. S., e'05. Associate in Electrical Engineering, University of Illinois, Urbana, Ill.

Biersach, R., m'06. Superintendent, Biersach-Niedermeyer Co., 220 5th St., Milwaukee, Wis. Bingham, J. B., c'11. Engineer with D. W. Mead, Madison, Wis.
Bingham, J. I., s'04. Estimator, McNulty Bros. Co., 1014 Frick Bldg., Pittsburg, Pa.
Birch, Albert, c'11. With S. Birch & Sons, Contractors. Fargo, No. Dekota.
Birchard, Ralph, g'10. With Shaw Advertising Co., 863 Transportation Bldg. Chicago, III.

Birchard, Ralph, g '10, With Shaw Zoo, Ill. Co., 863 Transportation Bldg., Chicago, Ill.

Birchard, Ralph, g 10. Will back.

Co., 863 Transportation Bldg., Chicago, Ill.

\*Bird, Henry, c '91. Deceased.

Bird, H. S., c '94. Attorney at Law. 230 Grand

St., New York, N. Y.

Birkett, M. W., e '08. Assistant Superintendent,

Light and Power Dept., Washington Water

Power Co., Spokane, Wash.

Bischel, J. M., E '12. Home: Bloomer, Wis.

Blackburn, F. M, E. '07. General Delivery, Denver, Colo. Home: Mt. Vernon, Ill.

Blaine, J. R. S., m '05. M. E. '11. Engineer,

Miehle Printing Press and Mfg. Co., Chicago,

Blake, G. B., e'10. E. E. '11. With Mississippi River Power Distributing Co., 414 Star Bldg., St. Louis, Mo.

Blake, H. D., c '11. With Wisconsin Highway Commission, Madison, Wis.

Blankenburg, H. L. g '08. Salesman, General Electric Co., 1006 Monadnock Bldg., Chicago,

tz, A. V., e'08. Supervising Engineer, Val Blatz Brewing Co., Milwaukee, Wis. Blatz,

Bleser, A. J., g '04. Farmer, Manitowoc, Wis. R. F. D. No. 7.
Bleyer, C. F., m '07. Erecting Engineer, Allis-Chalmers Co., 814 Frick Bldg., Pittsburg,

Pa. L. G., m '12. Structural Dept., Chain

Belt Co., Milwaukee, Wis.

Bliss, W. D., ch'13. Instructor in Mechanical Engineering, Marquette University, Milwau-

Engineering, Marquette University, Milwaukee, Wis.

Bliss, W. S., m '80.

Blood, F. H., '04. Engineer, General Electric Co., Schenectady, N. Y. Res.: 304 Becker St.

Blossey, A. F., m '05. Superintendent, Alton Gas and Electric Co., 1319 State St., Alton, Ill.

Boardman, C. C. m '10. Assistant to General Manager, Western United Gas and Electric Co. Aurora Ill.

Co., Aurora, III. Boardman, H. B., '93. Representative, American School Board Journal, 154 Randolph St., Chi-

Boardman, H. P., c'94. C. E. '11. Professor of Civil Engineering, University of Nevada. of Nevada,

Bock, J. G., c '07. Assistant Engineer, C. St. P. M. & O. Ry., St. Paul, Minn.
Bohan, W. J., '95. Mechanical Engineer, North-

ern Pacific Railway. 401 Northern Pacific Bldg., St. Paul, Minn. Boissard, R., '13. With National Lamp Works

of General Electric Co., Nela Park, Cleveland, Ohio. Home: 2245 Rowley Ave., Madison, Wis.

Boldenweck, F. W., '02. In Contracting Dept., Commonwealth Edison Co., 120 W. Adams St., Chicago, Ill.

C. U., c'83. City Engineer, Sheboygan. Boley, Wis.

Bolles, E. J., '05. Wire Chief, Pacific Telephone and Telegraph Co., 1068 W. 3d St., Santa Ana. Cal.

Bonesteel, L. G., Min '14. Engineer, Great North-

ern Iron Ore Properties, Bovey, Minn.
Boon, L. F., c'10. C. E. '12. Assistant Field Inspector, Railroad & Tax Commission, Madison, Wis.

Boone, Chas., '05. Construction Engineer, Chicago Telephone Co., 212 W. Washington St., Chicago, Ill.

Boorse, J. M., '95. Automobile Dealer, Miles City, Mont.

Borchert, Ernst, Jr., g '05. Orange Grower,

Anaheim, Cal.
Borchert, R. C., e '13. Engineer, Pawling and Harnishfeger Co., Milwaukee, Wis. Home: 1312 First St.

Borchsenius, H., min '13. Home: Baldwin, Wis. Borecky, C. W., '11. With Doherty Operating Co., 60 Wall St., New York City.
Bossert, C. P., '88. With Pfister and Vogel Leather Co., Milwaukee, Wis.
Boynton, C. W., '98. Bank Cashier, Pe Ell, Wash.
Boynton, J. E., '05. Mechanical Engineer. Room 1016, 134 So. La Salle St. Chicago, III

1016, 134 So. La Salle St., Chicago, Ill.
Braasch, W. K., m '12. Efficiency Engineer, Sheboygan Chair Co., Sheboygan, Wis.
Brace, J. H., c '92. Secretary and Treasurer,

Frace, J. H., C 92. Secretary and Treasurer, Fraser, Brace & Co., Contractors, 1328 Broad-way, New York, N. Y. Bracken, E. C., c '09. With Railroad Commission of Wisconsin, Madison, Wis.

of Wisconsin, Madison, Wis.
Bradford, Wm., e '04. Electrical Engineer, Laclede Gas Light Co., 716 Locust St., St. Louis, Mo.
Bradish, C. B., e '12. Testing Dept., General Electric Co., Schenectady, N. Y. Home: 717 Cass St., La Crosse, Wis.
Bradish, G. P., c '76. City Engineer, City Hall, La Crosse, Wis.
Bradley, W. H., c '78. Retired. 4537 Lake Park Ave., Chicago, III.
Bradshaw, J. W., e '06. Traffic Manager, Chicago

Bradshaw, J. W., e'06. Traffic Manager, Chicago

Telephone Co., 230 Washington St., Chicago, †Brainard, F. K., B. S. Mich. Agr. Coli., E. E. '08.

Electrical Engneer, Allis-Chalmers Co. Milwaukee, Wis. Brandel, C. O., e '08. General Manager, Peerless

Lamp Works, Warren, O.
Brandt, H. E., c'03. Manufacturing Jeweler, 1225
E. 63rd St., Chicago, Ill.
Branstad, R. E., c'12. Draftsman, 1218 Hartford

Bldng., Chicago. Ill. Brennan, B. C., c'05. City Engineer, Kenosha.

Brennan, W. M., c '94. Superintendent, Walsh Construction Co., of Davenport, Ia., Lewiston, N. Y. †Brenneman, J. L., E. E. '13. Testing Dept., Gen-

eral Electric Co., Schenectady, N. Y. Home: 122 Crescent St., Goshen, Ind.

122 Crescent St., Goshen, Ind.
Brenton, C. E., e'05. Auditor. Union Electric
Light and Power Co., St. Lous. Mo.
Brintnall, P. C., min. '13. Metallurgist, Tooele,
Utah. Home: Kalispell, Mont.
Brobst, J. E., e'03. Electrical Engineer, General
Electrical Co., Schenectady, N. Y.
Brooming A. E. 6'07, 206 N. Fifth St. Water.

Brocnniman. A. E., c'97. 306 N. Fifth St., Water-

town, Wis, Brown, E. S., c'08. In business, 215 N. 20th St., Birmingham. Ala.

Brown, G. W., c'86. C. E. '90. Assistant Inspector in charge of Naval Coal Depot, Tiburon, Cal.

Brown, L. R., e'03. Sales Engineer, General Electric Co., Schenectady, N. Y. Brown, P. F., c'97. City Engineer and Superin-

tendent of Streets, Oakland, Cal. Brown, S. L., min '89. Superintendent, St. Louis

Smelting and Refining Co., Collinsville. Ill.

Brown, T. R., c '95. Draftsman, Wisconsin Bridge & Iron Co., North Milwaukee. Wis. Brown, W. E., c '05. Assistant Engineer, Board of Water Supply. City of New York. 9 Val-ley Road, White Plains, N. Y.

Browning, E. E. Jr., e 12. Commercial Engineer, American Telephone and Telegraph Co., Chicago, Ill.

Brownlee, F. R., '08. Vice-President, F. A. Little

Co., Fond du Lac, Wis.

Brue, H. N., '11. Engineer, Bridge Dept., Wisconsin Highway Commission, Madison, Wis.

Bryant, J. O., '07. Economic Geologist, Frankfort,
Ky. Home: 508 Miles St., Chippewa Falls, Wis.

\*Bucey, J. H., c '95. Deceased.
Buchanan, J. W., c '06. Civil Engineer, Los
Angeles, Cal. Residence: 5111 Aldama St.

Angeles, Cal. Residence: 5111 Aldama St. Buchecker, A. I., e '08. With City Engineer, Box 1042, Spokane, Wash.
Bucher, Henry, c '10. Engineer, Railroad and Tax Commission, Madison, Wis.
Buckley, W. J., e '99. Secretary, The T. L. Smith Co., 1125 32nd St., Milwaukee, Wis.
Budd, H. L., e '10. Electrical Engineer, Edison Illuminating Ch., Detroit, Juch

Illuminating 'b., Detroit, Mich. Buerstatte, F. M., m'01. Instructor in Drawing,

Missouri School of Mines, Rolla, Mo. Buetow, W. C., c'08. Division Engineer, Wisconsin Highway Commission, Court House, La

Crosse, Wis. Buettell, R. B., c '13. Home: 417 West Locus: St.,

Buettell, R. B., c '13. Home: 417 West Locus: St., Dubuque, Ia.

Bull, E. H., g '05. With Green Engineering Co., 28 E. Jackson St., Chicago, Ill.

Bullerjahn, A. D., e '13. Engineer, Pawling and Harneschfeger Co., Milwaukee, Wis.

Bump, M. R., e '02. With Henry Doherty and Co., 60 Wall St., New York, N. Y.

Burdick, W. C., c '01. Manager, Track Dept., The Falk Co., Milwaukee, Wis.

Burgess, C. F., e '95. E. E. '98. President, Northern Chemical Engineering Laboratories Med-

ern Chemical Engineering Laboratories, Mad-

ison, Wis.

Burgess, G. H., c '95. Chairman, Valuation Committee, Delaware & Hudson Co., Albany, N. Y.

Burke, T. J., c'05. Division Engineer, Lehigh Valley, R. R. Co., Hazleton, Penn.
Burkholder, C. I., e'96, General Manager, Southern Power Co., Charlotte, N. C.
Burling, B. B., ch. '06. Professor of Electrical Engineering, James Miliken University, December 111 catur. Ill.

Burling, L. D., g '05. Invertebrate Paleontologist, Geological Survey of Canada, Ottawa, Can. Burmester, E. A., c '12. Junior Engineer, U. S., Lake Survey, Old Federal Bldg., Detroit,

Mich.

Burnett, E. S., m '05. Instructor in Experimental

Burnett, E. S., m '05. Instructor in Experimental Engineering, Sibley College, Cornell University, Ithaca, N. Y.
Burns, J. P., c '04. With Burns Bros. and Haley, Engineers and Contractors. Watertown, N. Y.
Burns, L. A., c '05. C. F. 12. Engineer, Chemung Canal Project, 414—418 Realty Rldg., Elmira, N. V.

Burritt, C. G., e'09. Instructor in Civil Engineering, University of Washington, Seattle,

Burt, C. R., c'11. Surveyman, U. S. Land Survey. Room 151, General Land Office, Washington,

D. C.
Burton, W. C., e'93. E. E. '99. Director, J. G.
White and Co. Ltd., 9 Cloak Lane, London.

E. C., England. Buser, J. T., c'09. ser, J. T., c'09. With Interstate Commerce Commission, Division of Valuation, 914 Karpen Bldng., 910 Michigan Ave., Chicago, Ill.

Bush, J. I., g'06. Bond Salesman, Second Ward Savings Bank, Milwaukee, Wis.

\*Bustamante, Luis, e'09. Deceased. Butler, W. G., c'13. Assistant Engineer, Chicago City Railway Co., 77th St. & Vincennes Road, Chicago, Ill. Home: Monticello, Wis.

Buttles, B. E., e'00. Electrical Engineer, Public

Service Co. of Northern Illinois, Chicago, Ill.
Buxton, V. R., e'13. Testing Dept., Electric Machinery Co., 14th Ave. and Tyler St. N. E.,
Minneapolis, Minn. Home: Spooner, Wis.
Byers, V. C., e'06. Residence: 1441 Logan St.,
Denver, Colo.
Byron, C. L., c'08. Assistant Patent Attorney,
Interpretional Herroster.

International Harvester Co., 606 Michigan Avenue, Chicago, Ill.

Avenue, Chicago, III.
Cadby, J. N., e'03, E. E. '07. Chief Inspector of
Electric and Telephone Service, Railroad
Commission of Wisconsin, Madison, Wis.
Cade, O. B., e'06. Manager, Pocahontas Light and
Power Plant, Pocahontas, Ia.
Cahill, R. H., c'13. With City Engineer, Mil-

waukee, Wis. Home: 683 Farwell Ave. Cahoon, O. B., m'04. Engine Expert, John Deere

Plow Co., Moline, Ill. Caldwell, W. G., c'10. Concrete Contractor, Pe-

waukee, Wis.
Calvin, C. J., c'06. Superintendent, American
Boston Mining Co., Diorite, Mich.
Campbell, Bert, c'98. Invalid. Evansville, Wis.
Carey, A. B., c'07. Construction Engineer, Salt

Spring Island, B. C., Can.
Carey, J. L., m'88. Paper Mill Engineer, 208 N.
Laramie Ave., Chicago, Ill.
Carlson, C. J., m'96. Contract Dept. Common

wealth Edison Co., Home Insurance Bldg., Adams and Dearborn Sts., Chicago, Ill.

Adams and Dearborn Sts., Chicago, III.
Carpenter, C. G., c '82. Superintendent of Parks,
City Hall, Milwaukee, Wis.
Carter, B. B., m '83. Consulting Engineer, 932
Monadnock Bldg., Chicago. III.
Carter, C. E., '04. E. E. '08, M. E. '10. Engineer,
Henry L. Doherty and Co., 60 Wall St.. New
York City York City.

Carter, P. J., c '04. Office Engineer, A. T. & S. F.
Ry., Amarillo, Texas.

Ry., Amarillo, Texas.

Carus, E. H. ch '12. La Salle, Ill.

Case, J. F., c '90. (Conferred 1913.) Vice-President, Cuban Engineering and Contracting Co., 17 W. 42nd St., New York City.

Casserly, J. F., e '05. Engineer, Chicago Telephone Co., Chicago, Ill.

Caverno, Xenophon, m '90. President, Kewaunee Water Supply Co., Kewaunee, Ill.

Cenfield, F. H., c '09. Efficiency Engineer, City of Chicago, 610 City Hall, Chicago, Ill.

Cerna, Santiago, c '08. Assistant Engineer Mon-

Cerna, Santiago, c'08. Assistant Engineer, Mon-terey Water Works and Sewer Co., Care of Esquina Zaragoza, y Dr. Mier, Aldama 12, Monterey, N. L., Mexico. Chadwick, A. B., ch '10. With Semet-Solvay Co., Lebanon, Pa.

\*Challoner, Frank, m '76. Deceased.

Chamberlain F. A., e '04. Engineer. Doherty Operating Co., 60 Wall St., New York City.
Chamberlain, G. W., c '10. Engineer, Wisconsin Highway Commission, Madison, Wis.

Chandler, M. E., m'13. Apprentice, Rock Island R. R., 47th & Wentworth Sts., Chicago, Ill. Home: 803 Lake Ave., Racine, Wis.

Chapman, L. L., g'10. Mining Engineer, Arthur Iron Mining Co., 610 Sellwood Bldg., Duluth. Minn.

Cheney, C. A., Jr., g'09. Geologist, 21 N. Butler St., Madison, Wis.

Cheney, S. W., m '04, M. E. '12. General Super-intendent, La Crosse Gas and Electric Co., La Crosse, Wis.

Christianson, A. E., c'13. Structural Engineer, Utah State Road Commission, 321 Felt Bldng., Salt Lake City, Utah. Home: Layton, Utah. Christie, H. A., m'11. Superintendent, Raymond

Concrete Pile Co., 111 W. Monroe St., Chicago.

Chuchian, A. A. M., C. '12. Surveyor, Mississippi River Commission, St. Louis, Mo. Res.: 4554 McMillan Ave.

Chuchian, S. M., e '09. Testing Engineer, Western Electric Co., 48th and 24th Sts., Hawthorne, T11.

Clark S. L., c'07. Iron Bridge Inspector, C. M. & St. P. Ry. Co., 1351 Railway Exchange, Chicago, Ill. Clausen, L. R., e'97. Manager, Dain Mfg. Co.,

Ottumwa, Ia.

Cleary, J. E., ch'07. Manufacturing Engineer, Western Electric Co., Hawthorne, Ill. Cnare, F., c'10. With G. C. Cnare & Son, 1315 Oakbridge Avenue, Madison, Wis. Cochrane, R. B., m'97. 84 S. Fitzhugh St., Roch-

ester, N. Y. Colburn, A. R., e'07. With Bradon Copper Mining Co., Rancagua, Chile.

Colby, L. W., c '71. Attorney, Beatrice, Neb.
Cole, C. M., m '02. Superintendent, Harrisburg
Gas Co., Harrisburg, Pa.
Cole, H. W., m '02. Secretary, Pressed Steele

Tank Co., Milwaukee, Wis.

Coleman, A. F., m'09. With B. M. Osbun Co.,
Commercial National Bank Bldg., Chicago,

Collins, A. L., e '08. Consulting Engineer, 112
Market St., San Francisco, Cal.
Colloday, E. B., g '09. Lieutenant, U. S. Military
Service, Ft. Howard, Md.

Comer, R. O., m'08. Draftsman, Isthmian Canal Commission, Gatun, C. Z., Panama. Comstock, Nathan, m'97. Patent Examiner, Pat-

ent Office, Washington, D. C.
Connolly, P. H. c '85. City Engineer, City Hall,
Racine, Wis.
Connor, S. P., c '99. Assistant Manager Contract
Dept., Geo. A. Fuller Co., 111 Broadway, New
York City. York City.

Conover, A. D., c'74. Architect, 36 Tenney Blk.,

Madison, Wis. Conrad, N. J., e'05. Testing Engineer, Commonwealth Edison Co., 84 Market St., Chicago, 111.

Conradson, C. M., m'83. Manufacturing Ineer, 1301 Rutledge St., Madison, Wis. Manufacturing Engi-

Conway, J. F., e'09. Insurance Inspector, Puget

neer, 1001.
way, J. F., e '09. Insurance Inspective Wash.
Sound Traction Co., Seattle, Wash.
W. M., g '06. Division Engineer, Wissenson, Green Bay, Conway, W. M., g '06. Division Engineer, consin Highway Commission, Green

Wis. Cook, J. K., m '09. Apprentice, C. M. & St. P. R. R. 3303 Mt. Vernon Ave., Milwaukee, Wis. Cook. T. R., m '00. Assistant Engineer of Mo-

tive Power, Penn. Lines West, Pittsburg, Pa.

\*Coombs, E. C., c'97. Deceased. Coon, R. J., c'05. Postmaster, Plainfield, Wis. Cooper, A. S., c'81. Retired, Black River Falls, Wis.

Cooper, M. D., e'08, E. E. '10. Economic Engineer, National Lamp Works, General Electric Co., Nela Park, Cleveland, O. Copp, W. J., m'08. Inspector of Equipment, American Locomotive Co., Dunkirk, N. Y.

Corbett, R. A., m '13. Draftsman, International Harvester Co., Milwaukee, Wis. Home: Na-tional Home, Wis.

Corner, D. C., min '13. Mining Engineer, Wisconsin Zinc Co., Platteville, Wis. Home: Platteville, Wis.

Cornish, R. C., c'97. Chief Engineer, The American Gas Co., West Washington Square, Philadelphia, Pa.

Cortelyou, G. S., c'08. Resident Engineer, Griffin Wheel Co., Sacramento Square, Chicago, Ill. Cortelyou, T., c'12. With Unit Construction Co., St. Louis, Mo.

Coup, F. T., E '12.

Cowan, G. P., e'11. Sales Dept., National Lamp Works, General Electric Co., Nela Park, Cleveland, Ohio. Cowie, H. J., c'03.

Chief Draftsman, Niagara Falls Power Co., and Canadian Niagara Pow-

er Co., Niagara Falls, N. Y. Craigo, R. T., g'05. Engineering and Sales Department, United Refrigerator and Ice Ma-

chine Co., Kenosha, Wis.
Crandal, H. R., m '98. With Hinder, Bamford,
Crandall Co., McGeogh Bldg., Milwaukee,

Wis. Crane, E. W., e '95. With Missouri Geological

Survey, Rolla, Mo.

\*Crenshaw, T. P., e '95. Deceased.

Cronk, F. B., c '05. Assistant Mining Engineer,
Oliver Iron Mining Co., Duluth, Minn.

†Crothers, H. M., E. E. '13. Instructor in Electrical Engineering, College of Engineering, Mad-

cal Engineering, Conege of Engineering, Radissison, Wis.

Crowell, G. G., e'10. Transformer Engineer, Westinghouse Electric and Mfg. Co. Res.: 1120 Ross Avenue, Wilkinsburg, Penn. †Crowell, Robinson, a b Stan. Univ., '95. E. E. '96. With Pacific Gas & Electric Co., Oakland,

Cal.

Crumpton, Wm. J., e '04. Manager Chicago Office, D. C. and W. B. Jackson, Harris Trust Bldg., Chicago, Ill.

Chicago, Ill.

†Cunningham, F. W., Ph. D. '11. With General Electric Lamp Co., Harrison, N. J.

Cunningham, J. W., c '08. Civil Engineer, 718 Overland Blvd., Portland, Ore.

Curtin, J. H., c '07. With G. Lindenthal, Chief Engineer, New York Connecting Railroad, 68 William St., New York City.

Curtiss, E. F., e '10. Secretary, Alliance Gas and Power Co., Alliance, Ohio.

Curwen, W. H., c '11. Irrigation Engineer, Grand.

Curwen, W. H., c'11. Irrigation Engineer, Grand

Junction, Colo. Cushing, W. T., ch'11. Assistant Chemical Engi-

neer, Cutler-Hammer Co., Milwaukee, Wis. Cutler, J. A., c'09. Salesman, Johnson Service Co., 177 N. Dearborn St., Chicago, Ill. Cutler, Manuel, '09. Assistant Engineer, Inter-

national Harvester Co., Milwaukee, Wis.

Daenitz, O. P. T., g'08. Traveling Salesman,
Harley-Davidson Motor Cycle Co. of Milwaukee. Mail Address, General Delivery, Seattle, Wash.

Dahl, C. T., c'09. Automobile Dealer, Westby, Wis.

Dale, D. P., c'11. With Memphis Steele Construc-

Dale, D. P., c'11. With Memphis Steele Construction Co., Memphis, Tenn.
Damon, W. H., e'12. With R. R. Commission of Wisconsin, Madison, Wis.
Daniels, G. C., m'08. Mechanical Engineer, Central Illinois Light Co., Peoria, Ill.
Daniels, P. H., c'10. Civil Engineer, 187 Carey St., Edmonton, Alb., Can.
Davidson, J. A., ch'04. Telephone Engineer, Western Electric Co., Chicago, Ill.
Davidson, P. E., e'06. Sales Engineer, Western Electric Co., 309 Magazine St., New Orleans, La.

La. Davila, L. J., c '11. Assistant Engineer, Porto Rico Irrigation Service. Juana Diaz, Porto

Rico. Davis, L. E., c'13. Teacher, State Agricultural

School, Jonesboro, Ark. Res.: 851 Broadway, Berlin, Wis. Davis, L. S., c'10. Junior Engineer, U. S. R. S.,

Babb, Mont. Davis, R. E., g '06. Director, Wisconsin State

Mining Trade School, Platteville, Wis. vis. R. G., e'12. With Traffic Dept., Chicago Telephone Co. Chicago, Ill.

Davis, S. H., g '09. Mine Superintendent, Century Zinc Co. Joplin, Mo.

Dean, C. L., m'01. Associate Professor of Mechanical Engineering, University of Nebraska, Lincoln, Neb.

Dean, G. C., m '03. Cream Tester, Hanford Producer Co., Wall, S. D.
Dean, J. E., g '07. General Contractor, 204 Camp

Bldg., Milwaukee, Wis.
Dean, J. S., m'03, M. E. '09. Mechanical Designer,
City Engineer's Office, Room 402, City Hall, Chicago, III.

DeBoos, F. A., c'09. Manager, Johnson Service
Co., 3132 10th St., Kansas City, Mo.

Decker, D. C., c'08. Manager, Decker Morse Construction Co., Benton, Wis.

Decker, R. P., e'13. Testing Dept., General Electric Co., Schenectady, N. Y.

DeLay, F. A., e'02. Teacher, Chicago Central Station Institute, 72 W. Adams St., Chicago,

Delgado, A. E., e'06. Automobile Agent. Motor Car and Supplies, Ltd., 67 and 69 Harbour St., Kingston, B. W. I. Delgado, Altmont, e'06. Partner in Kingston

Industrial Works, Kingston, Jamaica, B. W. I. Dequine, L. E., c'11. General Superintendent, Consolidated Gas Co. of New Jersey, Long

Consolidateu Gas
Branch, N J.

Derge, F. J., e '07. Manager Light Heat and
Power, Toledo Ry. and Light Co., Toledo. O.
Derge, M. L., e '06. Superintendent Trumbull
Public Service Co., Warren, O.
Dessert, H. L., c '04. Manager, Brawn-McRey-

Dessert, H. L., c'04. Manager, Brawn-McRey-nolds Lumber Co., 926 Association Bldg., Chi-

nolds Lumber Co., 926 Association Bidg., Chicago, Ill.
Diehl, A. S., c'07. Engineer, Oliver Iron Mining Co., Coleraine, Minn.
\*Diestler, G. A., c'08. Deceased.
Dietrich, F. W., c'10. Assistant Engineer, Water Board, Eugene, Ore.
Disque, R. C., c'08. Assistant Professor of Electrical Engineering, University of Wisconsin. Madison. Wis.
Distelhorst, C. A. R., c'12. Inspector, U. S. Corps

of Engineers, Fountain City, Wis. Dixon, Fred, c'97. Rancher, Corona, Cal.

Dixon, J. E., m'00. Assistant Sales Manager, American Locomotive Co. 30 Church St.. New York City. Dodd, R. L., e'13. With T. M. E. R. and L. Co.,

Milwaukee, Wis.

Dodge, McClellan, c'84. 913 University Avenue,

Madison, Wis.

Doershuk H. M., e'12. Assistant Electrical Superintendent, Aluminum Co. of America, Niagara Falls, N. Y.

Doherty, R. E., m'10. Sales Engineer, Grafton,

N. D.

Dohm, J. W., c'11. Engineer, Meriden Iron Co., Hibbing, Minn.

Donohue, Jerry, c'07. Civil Engineer, Sheboygan. Wis.

m '05. With Bayley Manufactur-

ing Co., 716, Prospect Ave., Milwaukee, Wis.
Dorr, G. N., m'12. Special Apprentice, Rock
Island R. R., Car Dept., 124th St. Shops, Chi-

Douglas, C. C., m'03. Steam Turbine Salesman, General Electric Co., Monadnock Bldg., Chicago, Ill.

Dousman, J. H., c'84. With American Well Works of Aurora, Ill., 404 Alliance Bldg..

Kansas City, Mo.

Dow, H. W., m '02. Sales Engineer. Nordberg Mfg. Co., Milwaukee. Wis.

Downing, R. C., ch'10. With Peoples Gas Light and Coke Co., Chicago, Ill. Residence: 447 W. 67th St.

Drew, H. W., g'09. Service Dept., Nordyke and Marmon Co., 2328½ Central Avenue, Indianapolis, Ind.

Drought, O. H., '08. Draftsman, Office of Superintendent of Bridges and Public Bldg., City Hall, Milwaukee, Wis. Duffy, W. F., c'84. U. S. Deputy Surveyor, Col-

fax, Ia.

iax, ia.

†Duke, C. S., C. E. '13. Engineering Department.
City of Chicago, City Hall, Chicago, Ill.
Dunlap, G. L., g '06. Farmer, Mazomanie, Wis.

\*Durand, S. B., c '91. Deceased.
Dutcher, J. E., e '97. Mechanical Engineer,
Schmidt-Garden and Martin, Architects, 172
Washington St., Chicago, Ill.
Dutton R. K. c '09. Engineer, Rogers Brown

Dutton, B. K., c'09. Engineer, Rogers Brown Iron Co., Hibbing, Minn.

Eagle, C. C., e'07. Salesman, W. J. McKenna Co., Room 526, 9 So. Clinton St., Chicago, Ill. \*Earle, R. R., e '02. Deceased.
Earll, C. I., m '85. Consulting Engineer, 11 Broadway, New York, N. Y.
Ebert, F. C., c '07. Assistant Engineer, U. S. G.

Ebert, F. C., c '07. Assistant Engineer, U. S. G. S., 619 Federal Bldg., Los Angeles, Cal. Edmund, C. E., m '07. Chief Inspector, Seager Engine Works, Lansing, Mich. Edmund, H. W., m '11. Commercial Agent, Western United Gas and Electric Co., Aurora, Ill. Edwards, B. V., m '09. President, B. V. Edwards Co., 45 Austin St., Newark, N. J. Edwards, Vernon, c '09. Civil Engineer, P. R. L. & P. Co., Electric Bldg., Portland, Ore. Egelhoff, R. F., m '07. With Turner Construction Co., 312 Prudential Bldg., Buffalo. N. Y. Ehreke, G. W., e '02. With American Bridge Co., 40th St. and Princeton Ave., Chicago, Ill. Ehrnbeck, A. D., c '02. 1132 Trenton St., Los Angeles, Cal.

Angeles, Cal.

Ekern, F. A. e'03. Hydroelectric Engineer, Stone Ekern, F. A. e '03. Hydroelectric Engineer, Stone and Webster Co., 147 Milk St., Boston Mass. Ela. E. S., c '96. Civil Engineer, Rochester, Wis. Elliott, B. G. M. E. '13. Instructor in Mechanical Engineering Extension Division University of Wisconsin, 175 Main St. Oshkosh, Wis. Elliott, H. S., e '03. Rancher, R. F. D., Worden,

Mont.

\*Ellis, J. F., c'87. Deceased. Elmore, S. E., m'06. Central Sales Manager, Bucyrus Co., 622 McCormick Bldg., Chicago,

\*Elser, R. C., c '98. Deceased.
\*Elvis, G. H., m '04. Deceased.
Ely, A. W., c '12. Concrete Inspector, Ortonville,
Minn. Home: Edgerton, Wis.

Ely, E. A., m'09. Sales Engineer, 504 Canada Bldg., Winnepeg, Man., Can. Emerson, F. M., c'00. Contracting and Engineering, Plankington Block, Milwaukee, Wis.

Enders, W. J., e '11. Engineer, Chicago Tele-phone Co., 222 W. Washington St., Chicago,

111. †Engle, S. G., Ch. E., '07. Head of Science Dept., Gary Public Schools, Gary, Ind.

Engsberg, E. E., e '09. Telephone Engineer, Lake Mills, Wis.

Erbach, W. L., m '93. Vice President and Manager, Rietbrock Land and Lumber Co.,

Athens, Wis.

Eriksen, E. T., c'89. Assistant Engineer, U. S.
R. S., Hermiston, Ore.

Erikson, K. W., ch'13. With U. S. Forest Prod-

ucts Laboratory, Madison, Wis. Erwin, O. R., e'04. Engineer with Erwin and Wheeler, Patent Attorneys, 78-81 Loan and

Trust Bldg., Milwaukee, Wis.
Esau, C. W., c'11. With Esau Kroening Construction Co., 483 Reeds St., Milwaukee, Wis. Eskuche, O. A., m'06. Erecting Superintendent, Gramm Motor Car Co., Lima, O. Estberg H. C., e'07. Manager, Greeley Gas and Fuel Co., Greeley, Colo.

Eustis, C. L., c'06. Rancher, Los Molinos, Cal.

Evans, E. M., c '94.

Evans, G. B., c '94. Chief Engineer, Laclede Gas

Light Co., 716 Locust St., St. Louis, Mo.

Evans, M. J., m '13. Home: Riverside, Ill.

†Evinger, M. I., C. E. '13. Associate Professor of

Civil Engineering, Iowa State College, Ames,

Ia. Ewald, R. F., c'05. With Knoxville Power Co.,

Alcoa, Blount Co., Tenn.

Faber, M. E., m'09. Advertising Manager, C. A.

Shaler Co., Waupun, Wis.
Fairchild, D. L., c '90. Vice President, Duluth
Dtamond Drilling Co., 500 Lonsdale Bldg., Duluth, Minn.

Falconer, D. P., c'05. Engineer, Maintenance of Way, New York State Railways, 267 State St., Rochester, N. Y.
Falconer, R. C., c'95. Superintendent of Construction, Eric R. R., 50 Church St., New

York City.

Falk, G. S., g '10. With Milwaukee Patent Leather Co., Milwaukee, Wis. Falk, H. S., g'06. General Superintendent, The

Falk, H. S., g vo. General Superintendent, The Falk Co., Milwaukee, Wis. Farnham, F. F., ch'09. Chemical Engineer, Na-tional Metal Moulding Co., Economy, Penn. Farris, J. A., m'00. Assistant Chief Draftsman, Whiting Foundry Equipment Co., Harvey,

Il.

Fay, C. A., min'11. Mining Engineer, Federal Mining and Smelting Co., Wardner, Idaho. Fehlandt, W. L., c'12. With Wisconsin Highway Commission, Madison, Wis. Fehr, Herman, m'84. Lawyer, 404 Majestic Bldg.,

Felr, Herman, m '84. Lawyer, 404 Majestic Bldg., Milwaukee, Wis. Feige, H. B., e '06. Chief Operator, Gatun Power Plant, C. Z., Panama. Fellows, K. E., c '12. Inspector, U. S. Engineers Office, Rock Island, Ill.

Fetzner, E. J., c '11. Surveyor, U. S. Engineer's Office, La Crosse, Wis. Field, G. A., m '08. Gas Producer Designer, Cam-

den Iron Works, Camden, N. J. Findelsen, C. R., e'13. With Chicago Telephone Co., Chicago, Ill. Home: 517 E. Walnut St., Co., Chicago, Ill. Green Bay, Wis. Secretary, Sun Coal Co.,

Fisher, A. A., c'07. Caryville, Tenn.

Fisher, C. R., c'11. With Canadian Bridge Co., Portage du Fort, Quebec, Can.

Fisher, E. J., c'04. Assistant Engineer, D. L. & W. R. R., Hoboken, N. J.

Fisher F. E., c'06. Test Floor Foreman, Diehl Mfg. Co., Elizabeth, N. J.

Fisher, Herbert, c '13. 402 N. Spring St., Beaver Dam, Wis.

\*Fisher, J. J., c'76. Deceased.

Fisher, J. R., c '74. C. E. '80. Farmer, Beaver Dam, Wis.

Fisher, R. W., g'09. Home address: Phillips. Wis.

Fisher, S. M., c '09. Assistant Engineer, Pana-ma-Pacific Exposition, Service Bldg., San Francisco, Cal.

Fitch, W. K., m'13. Engineer, Dravo Doyle Co., Diamond Bank Bldg., Pittsburg, Pa. Home: 849 N. Main St., Rockford, Ill. Flagg, W. H., c'06. Engineer, Chicago Telephone

Co., Chicago, Ill.

\*Flaig, John, c'04. Deceased.

†Foote, F. J., B. S. Univ. of Ill., E. E. '02. Master Mechanic, Ohio Electric Railway Co., Columbus, Ohio.

Force, H. H., E '10. Chief Electrician, Stanley Works, New Britain, Conn.

Ford, A. H., e '95. E. E. '06. Professor of Electrical Engineering, State University of Iowa. Iowa City, Ia.

Ford, F. H., e 93. Sales Manager, Mechanical Appliance Co., 133 Stewart St., Milwaukee, Wis.

Ford, R. H., e '09. Electrical Engineer, Genera' Electric Co. Res.: Y. M. C. A., Lynn, Mass. Foster, D. E., m '06. Professor of Mechanical En-

gineering, Washington State College, Pulman, Wash.

Fowle, F. F., c '93. Physician, Milwaukee Hospital for Insane, Wauwatosa, Wis.
Fowle, H. H., e '95. 4204 Eiring Place, Milwau-

kee, Wis.

Fowler, M. M., e'01. Engineer, General Electric

Co., Monadnock Bldg., Chicago, Ill.

Fowler, W. O., c'12. Engineering Dept., C. M. & St. P. Ry. Co., Chicago, Ill.

Fox, G. E., e'08. Salesman, Ft. Wayne Electric Co., 901 Plymouth Bldg., Chicago, Ill.

Fox, Henry, m '92. Contracting Engineer, Maryland Dredging and Contracing Co., Furst-Clark Construction Co., 1515 Fidelity Bldg.,

Baltimore, Md.

Frankenfield, Budd, e '95. E. E. '96. 1007 S. Hill St., Los Angeles, Cal.

Fraser, Erwin, m'13. The Fraser Co., 667 E. Water St., Milwaukee, Wis.

Fraser, John, Jr., m'12. General Superintendent,
The Fraser Co., Milwaukee, Wis.
Fratt, F. W., c'82. President, Union Depot,
Bridge & Terminal Railroad Co., 430 Midland Bldg., Kansas City, Mo. Freeman, W. J., m '07. Mechanical Engineer, Wis-

consin Railroad Commission, Madison, Wis. Freschl, Edward, m'99. President, Holeproof Hosiery Co., Milwaukee, Wis. Fretz, E. A., c'10. Dept. of Natural Resources, C. P. Railway, Calgary, Alb., Can. Fretz, L. A., e'10. Inspector, Public Service Co.,

Pontiae, Ill.

Friend, J. H., Jr., e'03. Chief Engineer, Great Southern Lumber Co., Bogalusa, La.

Froehlich, F. R., M '09. Efficiency Engineer, Sheboygan Couch Co., Sheboygan, Wis.

Frost, D. K., e'04. With General Electric Co., Schenectady, N. Y. Res.: 121 Waverly Place. Frost, F. S., m'08, M. E. '12. With Frost Engine

Co., Evansville, Wis.

Frost, O. J., min'82. Assayer. 511 18th St., Denver, Colo. Fucik, R. A., e'10. With Rails of Wisconsin, Madison, Wis. With Railroad Commission

Fugina, A. R., c'98. Signal Engineer, Louisville & Nashville Ry. Co., Louisville, Ky.
Fuldner, H. C., c'97. President, Fuldner Construction Co., 602 Majestic Bldg., Milwaukee,

Wis. Fuller, Clifford, m '10. Secretary, Ideal Tool and Specialty Co., 321 Frankfort Ave., N. W., Cleveland, O.

Fuller, J. E., m'12. Wit Mfng. Co., Aurora, Ill. With Stephens-Adamson

Funk, W. F., m '91. Secretary, La Crosse Boiler Co., Gould and Mill Sts., La Crosse, Wis.

Fussell, Lewis, M. S. Swathmore. E. E. Ph. D. 107. Assistant Professor of Electrical Engineering, Swarthmore College, Swarthmore, Pa.

Gaarden, O. H., e'07. Insurance Agent, 426-430

Somerset Bldg., Winnepeg, Man., Can.
Gage, S. W., c'08. First Assistant Engineer,
State Highway Commission, Albany, N. Y. Galloway, E. W., m '04. With Illinois Northern Utilities Co., Dixon, Ill.

Gapen, J. C., e '03. Engineer of Electrical Dis-tribution, Public Service Co., of Northern Illinois, 137 S. La Salle St., Chicago, Ill. Gardner, Harry, g'05. Instructor in Mechanics. University of Illinois, Champaign, Ill.

Gardner, Stephen, e'02. Salesman, Westinghouse Electric and Manufacturing Co., 1420 N. Y.

Life Bldg., Chicago, Ill.

Garner, H. L., c '09. Instructor in Hydraulic and Sanitary Engineering, University of

Wisconsin, Madison, Wis.

Garnock, A. R., c'09. City Engineer, Eau Claire Wis.

\*Garrens, G. W., c'04. Deceased. Gaskell, C. G., m'12. Assistant Manager, Insulation Dept., H. W. Johns—Manville Co., Residence: 4119 Westminster Place, St. Louis, Mo.

Gates, H. B., c'05. Assistant Engineer, Public Service Commission, New York City, 103 E. 125th St., New York City. Gattiker, W. A., e'07. With D. W. Mead, Con-sulting Engineer, 530 State St., Madison, Wis.

Gayton, O. F., c'09. Assistant Engineer, Alvord & Burdick, 1417 Hartford Bldg., Chicago. T11.

Geerlings, H. J., m '03. With Pfister and Vogel Leather Co., Milwaukee, Wis. Gelbach, W. A., c '07. Draftsman, Bridge Dept., C. & N. W. Ry., Room 928, 226 West Jackson Blvd., Chicago, Ill.

Geltch, Ernest von, e '11. 140 Breeze Terrace, Ma-

dison, Wis.
George, M. W., m'13. With H. F. Norcott and Co., Real Estate, Loans and Insurance, 1007 E 43d St., Chicago, III. Gerdtzen, G. A., m'93. M. E. 95. 317 East Fifth

St., Winona, Minn.

Gerlach, T. A., c '98. Chief Draftsman, The Buda
Co., Harvey, Ill. Residence: 15312 Turlington

Ave., Harvey III. Geyer, A. N., e'10. With Telluride Power Co.. Grace, Idaho.

Gibson, L. E., e'10. Electrical Engineer, Big Creek, Cal.

Gibson, W. G., g '08. Traveling Inspector, Flan-

nery Bolt Co., Bridgeville, Pa. Gibson, W. J., m'02. Foreman, Machine Shop, Logemann Bros., 282 Oregon St., Milwaukee, Wis.

Gielow, E. H., e'07. Switchboard Engineer, Chicago Telephone Co., 230 W. Washington St.,

Chicago, Ill. Gillespie, J. E., c'08. Division Engineer Wisconsin Highway Commission Grand Rapids. Wis.

Gillette, E. S., M'13. Assistant to the Engineer, Aurora, Elgin and Chicago Electric Railroad, Wheaton, Ill. Home: 311 Galena Blvd., Aur-

Gilman, A. F., c'10. Rodman C. & N. W. Ry., Boone, Ia. Gilman, E. D., ch'13. Graduate Student University of Wisconsin, 803 State St., Madison,

Gilman, J. M., c'04. Assistant Engineer, C. M. & St. P. Ry., 617 White Bldg., Seattle, Wash.

Gilman, Stephen, g'10. Manager, Credit Dept., Tennessee Coal, Iron and Railroad Co., Birmingham. Ala.

Gingrich, H. E., c '10. Assistant Engineer, Riter-Conley Mfg. Co., Worcester, Mass. Glab W. N., m '07. With Board of Supervising

Engineers, Chicago Traction. 105 La Salle St., Chicago, Ill.

Glaettil, J., Jr. c'09. Instructor in Structural Engineering, University of Wisconsin, Madison. Wis.

Gleason, E. P., m'10. Assistant Engineer, Nekoosa Edwards Paper Co., Port Edwards,

Glick, G. A., m '10. With G. A. Lowe Co., Ogden. Utah.

Glover, L. E., e '11. Accounting Dept., A. T. and T. Co., 15 Dey St., Room 1301, New York City. Goddard, A. L., m'90. Superintendent of Shops.

Goddard, A. L., m '90. Superintendent of Shops. University of Wisconsin Madison, Wis.
 Godfrey, P. S., m '10. Traveling Salesman, E. R. Godfrey Sons Co., Wholesale Grocers, Milwaukee, Wis.
 Goedjen, A. J., e '07. Electrical Engineer, Merchants Heat and Light Co., 33 So. Meridian St. Indiagapolis Ind

St., Indianapolis, Ind. Goeke, O. F., c'11. Draftsman, American Bridge Co., Lassig Plant, Wrightwood & Clybourn

Aves., Chicago, Ill. Goetz, Edgar, g'04. Chief Engineer, St. Paul Foundry Co., St. Paul, Minn.

Gold, Solon, c'05. Assistant Engineer, 408 City Hall, Chicago, Ill.

Golder, L. W., m 95. Secretary Metal Special-ities Mfg. Co. 736 West Monroe St., Chicago,

Gomez, Pastor, c'09. Civil Engineer, Bureau of

Public Works, Manilla, P. I.

Goodenough, C. F., g '03. Superintendent Aetna
Paper Co., Dayton, O.

Gormley, J. H., g '06. Superintendent of Con-struction for Geo. B. Post and Sons, Architects, State Capitol, Madison, Wis.

Gottschall, H. H., e'10. Inspector, Public Service Co., of Northern Illinois, North Crystal Lake, Ill.

Goudie, James, e'03. Mechanical Engineer, New-port Mining Co., Ironwood, Mich. Graetz, W. C., e'12. Engineer, Crocker-Wheeler

Co., Ampere, N. J.

Graff, B. H., c'08. Local Manager, Lange Engineering and Construction Co., Crowe Bldg., Radcliffe, Alb., Can.

Graff, C. F., c '04. Contracting Engineer, 603-604 Creary Bldg., Seattle, Wash.
Graham, G. A., c '05. With Arthur McMullen and Hoff Co., 131st St. and Lexington Av., New York City.

\*Granke, L. E., c'00. Deceased. \*Grant, D. M., min '11. Deceased.

Grant, D. M., min 11. Deceased.

Gray, C. F., m'11. Foreman, Wagner Electric Mfg. Co., St. Louis, Mo.

Greaves, A. C., c'03. City Engineer, Sturgeon Bay, Wis.

Green, C. W., e'07. Instructor in Electrical Engineering, Massachusetts Institute of Technology Roston Mass nology, Boston, Mass.

Greenfield, Benjamin, e'07. Results Engineer, Lincoln Gas and Electric Light Co., Lincoln,

Gregerson, L. T., c '95. Assistant Engineer, C. & N. W. Ry. Co., Room 908, 226 W. Jackson Blvd., Chicago, Ill.

Gregg, H. B., m '92. Farmer, R. F. D. No. 6. Madison, Wis.

Gregory, Stephen S., Jr., m '13. With Ilinois Maintenance Co., 112 Adams St., Chicago Ill. Greisen, E. C., m'07. Chief Draftsman, Fuel Dept. Power and Mining Machinery Co.,

Cudahy, Wis. Greve, F. W., Jr., m'08. M. E.'09. Instructor in Mechanical Engineering, Purdue University, Lafayette, Indiana.

Grey, J. C., m '02. Superintendent, Savannah Gas Co., Savannah, Ga.

Griffith, J. H., c '93. In charge of Physical Testing Laboratory, U. S. Bureau of Stand-ards, U. S. Arsenal, Pittsburg, Pa.

Griffith, W. H., c'12. Assistant Engineer, Lucas County Sanitary Engineering Dept., Court House, Toledo, O.

Griswold, E. C., e '09. Engineer, General Electric Co., Schenectady, N. Y. Griswold, J. W., m '13. Cadet Engineer, Denver Gas and Electric Co., Denver, Colo. Home: West Salem, Wis.

Griswold, R. G., m'04. Engineer, Henry Doherty dske, W. J., Jr., c'08. Assistant Engineer, Bureau of Public Works, Manila, P. I.

Gross, E. L., ch'08. Consulting Engineer, 1112 W. 37th St., Chicago, Ill. Gross, G. L. c'08. Secretary, Water and Light Dept., Duluth, Minn.

Grover, A. J., c'81. Civil Engineer, Room 235

Merriam Block, Council Bluffs, Ia.

\*Grover, A. S., m '95. Deceased. Grunert, A. E., g '07. Fuel Engineer, Commonwealth Edison Co., Chicago, Ill. Residence: 3716 Pine Grove Ave.

Haag, E. C., ch'11. Ass't. Chemist, American Asphalt and Rubber Co., Harvester Bldg., Chicago, Ill.

Haase, Alvin, c'03. Inspecting Engineer, Pittsburg Testing Laboratory, 134 E. 18th St., Minneapolis, Minn. Hackney, R. H. m '93. President, Pressed Steel

Tank Co., Milwaukee, Wis. Hadfield, R. H., m'03. Theatre Work, mobile Manufacturing, Mining. Residence: 1415 12th St., Superior, Wis.
Haevers, Wm., e '09. District Inspector. 422 Liberty St., Morris, III.
Hague, F. L., e '08. Assistant Engineer, Toltz

Engineering Co., St. Paul, Minn.

Hahn, J. F., e '03. Structural Engineer with

Wm. G. Fargo, 226 W. Main St., Jackson, Mich.

\*Haight, T. W., min '82. Deceased. Hain, E. L., c'10. Assistant Topographer, U. S.

G. S., Washington, D. C. Hain, J., C. c'93, C. E., '05. General Manager, Los Angeles Cement Gun Co., 408 Lessner

Bldg., Los Angeles, Cal. Bert, C. A., c'08. Engineer, Wisconsin Rail-road Commission, Madison, Wis.

Hale, F. E., c'09. Draftsman, Alabama Power Co., Brown-Marx Bldg., Birmingham, Ala. Haley, G. H., c '05. Ass stant Engineer, N.

State Barge Canal, Oswego, N. Y. l. E. M., c'04. With Davenport Locomotive

Works, 14 South Canal St., Chicago, Ill. Hall, M. G., c'04. Consulting Engineer, Centerville, Ia. Hall, S. P., c'10. Engineer Wisconsin Highway

Commission. Eau Claire, Wis. Halladay, F. S., c'13. Land Surveyor, Plover. Wis.

Wis.
Halliday, M. J., m'08. In Insurance Business, 1026 Rogers Bldg., Vancouver, B. C. Canada.
Halseth, C. M., c'11. Junior U. S. Engineer, Room 406, Custom House, Milwaukee, Wis.
Hambrecht, A. L., c'10. With D. W. Mead, Con-

sulting Engineer, Madison, Wis. Hambuechen, Carl, e'99, E. E. '01. Superintendent, American Battery and Carbon Co., East St. Louis Mo.

Hamilton, H. F., c'92. Resident Engineer, Great Northern Railway, Room 709, Great Northern Bldg., St. Paul, Minn.

Hammerschlag, J. G., m'02. With United Refrigerator and Ice Machine Co., Kenosha, Wis. Hammond, L. M., c'10, C. E. '13. Junior Engineer U. S. R. S., Provo, Utah.

Hancock, L. M., m '88. M. E., '05. In business R. F. D. 4. Box 25, Walsonville, Cal.

Handy, E. H., e'11. Inspector American Bridge Co., 40th St., and Princeton Ave., Chicago, II1.

Hankinson R. L., g'05. Superintendent, Fifth Lighthouse District, Custom House, Balti-more, Md., Residence: Ashburton Apts., Walbrook, Md.

Hansen, C. A., ch'05. Research Chemist, General Electric Co., Schenectady, N. Y.
Hansen C. J., min'13. Sampler, A. C. M. Co., Butte, Mont. Home: 412 W. Granite St., Butte, Mont.

Hansen, Oscar, e'94. With Sanitary District of Chicago, Monroe and Dearborn Sts., Chicago, III.

Hanson, F. H., e'04. Engineer, Southwestern Bell Telephone Systems, St. Louis Mo. Residence: 517 Hamilton Ave.

Hanson, H. O., e'99. 532 Second Avenue, Detroit,

Mich.

Hanson, W. S., m '95.

Hardacker, R. J., e '06. With D. C. and W. B.

Jackson, 111 Monroe Sts., Chicago, Ill.

Hare, K. R., e '11. Chief Electrician, Northern

Pacific R. R., 401 Northern Pacific Bldg., St.

Hargrave, R. W., m '98. Extension Department,
University of Wisconsin, 1139 Rutledge St.,
Madison, Wis.
Harlacher, L. R., c '05. Superintendent, McGreevy Steel Co., Iron River, Mich.
Harley, W. S., m '07. With Harley-Davidson

Harley, W. S., m'07. With Harley-Davidson Motor Co., Milwaukee, Wis.
Harriman, F. J., c'89. City Mail Carrier Appleton, Wis.
Harris, H. J., min'93. Division Engineer, O. S. L. R. R. Co., Salt Lake City, Utah.
\*Harrison C. N. c'82. Deceased.
Harrison, S. H., e'13. Traffic Dept., Chicago Telephone Co., Chicago, Ill. Home: 721 State St., La Crosse, Wis.
Hart, C. W., m'96. President, Hart-Parr Co., Charles City. Ia.

Charles City, Ia.

Hart, J. G., g'06. Assistant Engineer, Public Service Co., 137 La Salle St., Chicago, Ill.

Hart. R. W., C'12. Civil Engineer, U. S. Engineers, Rock Island, Ill. Home: Atlanta,

Ga.

Hartman, R. B., c'02. Contracting Engineer. 823-829 Wells Bldg., Milwaukee, Wis. \*Hartwell, F. L., m'95. Deceased.
Harvey, H. V., m'13. With Harvey Spring and Forging Co., Racine, Wis. Home: 2002 Washington Ave., Racine, Wis.

Harvey, J. L., m '00. Draftsman, International Harvester Co., Milwaukee, Wis.

Harvey W. R., e'05. Secretary, Wernicke Hatch-

er Pump Co., Grand Rapids, Mich. Harwick, G. D., e'12. Engineering Dept., Chicago Telephone Co., Chicago, Ill.

Harza, L. F., c'06, C. E. '08. Consulting Engineer 801 Lewis Bldg., Portland, Ore. Hatch, S. R., c'07. Division Engineer, Railroad and Tax Commission, Madison, Wis.

Hatch W. A., c'11. Surveyor, U. S. Engineers, Rock Island, Ill.

Hathaway, Warner, m'12. Engineer, Beaver Dam Malleable Iron Co., Beaver Dam, Wis. Hatter, C. P. ch'05. Member Hoppe-Hatter Mo-

tor Co., 1543 Broadway, Milwaukee, Wis.
Haugan, C. M., e '05. Inspector and Appraiser,
State Bank of Chicago, Cor. Washington and
La Salle Sts., Chicago, Ill.

Hauser, W. H., m 04. Engineer of Tests, C. and E. I. R. R., Oaklawn Shops Danville, Ill.

Haven George, min '76. With Crow Wing Lumber Co., Waterloo, Ia. Hawkins, B. H., m'13.

Hawley, E. J., g'08. City Engineer, Hibbing, Minn.

Hawn, R. J., c'01. Manager, Virginia Portland Cement Co., Fordwick, Va. Hawthorne, G. E., m'13. Salesman, United Re-frigerator and Ice Machine Co., Kenosha, Wis. Home; Monroe, Wis. Hayden, C. B., e'96. Contractor, Sun Prairie,

Wis.

Hayes, M. T., c'08. General Contractor, Janes-

ville, Wis. dd, C. E., m '13. Assistant Mana-Head, C. E., m '13. C. E. m '13. Assistant Manager, Head-Simmons Publishing Co., Kenosha, Wis.

Heald, E. H., c '00. With American Bridge Co.,
72 West Adams St., Chicago, Ill.
Hebberd, L. L., M '11. Mechanical Engineer for Yaugh, Meyer and Sweet, Consulting Engineers Medicated National Sweet, Consulting Engineers gineers, Majestic Bldg., Milwaukee, Wis. Hedke, C. R., c '00. Irrigation Engineer,

Acacio, Colo.

Heebink, G. E., c'08. Surve Blk., Beloit, Wis.

\*Hegg, J. R., c'02. Deceased. Surveyor, 222 Goodwin

Heideman, W. R., e '05. With Pullman Co., Hot Springs, Ark. Permanent: Care 'J. L. Walker, Sup't., Pullman Co., Chicago, Ill. Heimbach, E. B., e '13. Inspector Railroad Commission of Wisconsin, Madison, Wis. Home:

Honey Creek, Wis. Heine, R. E., e '98. Superintendent, Reid Bros., Consulting Engineers, 1500 Call Bldg., San Francisco, Cal.

Hejda, C. J., e'03. Testing Engineer, Commonwealth Edison Co., 28 N. Market St., Chicago,

Hejda, C. W., e '07. Deputy Engineer, Bureau of Fire Prevention and Public Safety, City Hall, Chicago, Ill.

Hejda, J. W., c'08. Mining Engineering Co., Box 777, Virginia, Minn.

Heller, H. L., c'06. Construction Engineer, Wisconsin Telephone Co., 183 5th St., Milwaukee, Wis.

Helmholtz, A. W., e'05. Mechanical Engineer, Continuous Process Coke Co., 1337 First National Bank Bldg., Chicago, Ill.

Helzer, A. E., e '05. Engineer, Chicago Telephone

Co., Chicago, Ill. Henderson, D. F., e'07. Assistant Superintendent, Washington Water Power Co., Spokane, Wash.

Henke, F. C., C '10. Wautoma, Wis. Henningson, E. S., e '12. Testing Dept., General Electric Co., Schenectady, N. Y.

Henry, R. R., e '04. Farmer, R. F. D., No. 1, Alma, Wis.

Herdegen, R. T., e'06. With A. O. Smith Co., Milwaukee, Wis.

†Herrick, A. L., C. E. '10. Educator, 118th St. and Broadway, New York City. Heyroth, A. H., e'07. Development Engineer,

Broadway, New York City.

Heyroth, A. H., e'07. Development Engineer,
Hamarden, Mont. Residence: Care Frank
Strouf and Co., Stanford, Mont.

Hibbard, A. C., e'07. In Real Estate and Insurance Business. 1411 Hoyt Avenue, Everett,

Wash.

Higson, C. R., m'07, E. E. '12. With Utah Power and Light Co., Salt Lake City, Utah.

Hile, C. H., M. E., '93. Chief of Maintenance, Boston Elevated Railway Co., 101 Milk St., Boston, Mass.

. J. M., ch'03. With Trenton, Bristol and Philadelphia Street Railway, 204 Radcliffe St., Hill. Bristol, Pa.

Hills, E. V., e'11. Home: Waupun, Wis.

Himmelstein, A. L., c'12. Bridge Dept., C. M. & St. P. Ry., 1242 Railway Exchange, Chicago,

Hine, W. F., e'07. Chief Gas Engineer, Public Service Commission of First District. Tri-

Service Commission of First District. Tri-bune Bldg., New York City.

Hinn, W. H., c '10. With A. P. Silliman, Mining Engineer, Hibbing, Minn.

Hinrichs, C., m '90. Chief Engineer, Seattle Con-struction and Dry Dock Co., Seattle, Wash.

Hintze, P. H., c '11. Drainage Engineer, 207 W.

Main Street Madison, Wis

Hintze, P. H., c 11. Drainage Engineer, 207 W. Main Street, Madison, Wis.
Hippenmeyer, I. R., m '02. With Creamery Package Manufacturing Co., Ft. Atkinson, Wis.
†Hirsch, Alcan, B. S., Univ. of Texas, '06. M. S., '07, Ch. E., '09. Ph. D., '11. Consulting Chemical Engineer. Chemists Bldg., 50 E. 41st St. New York City.

41st St., New York City.

Hirsch, J. G., c'08, C. E., '11. With Bates and Rogers Construction Co. of Chicago at Duluth, Minn.

Hirschberg, E. S., g'07. Contracting Engineer,

211 Grand Avenue, Milwaukee, Wis. Hirschberg, W. P., c'01. Civil Engineer. 397 Summit Avenue, Milwaukee, Wis. Hirshheimer, H. J., m'91. General Manager, La

Hirshheimer, H. J., m '91. General Manager, La Crosse Plow Co., La Crosse, Wis. Hitchcock, F. A., g '10. Instructor in Structural Engineering, Cornell University. Room 47 Lincoln Hall, Ithaca, N. Y. Hobart, F. G., M. E., '90. Chief Engineer, Fair-banks Morse Mfg. Co., Beloit, Wis. Hodge, J. S., m '04. Hodges, Paul, g '09. City Engineer, Monroe, Wis.

Wis. Hoefer,

A. U., m'06. Engineering Dept., Chicago Telephone Co., 230 Washington St., Chicago, Ill. Hoefer, C. A., m '05. General Manager, Hoefer

Manufacturing Co., Freeport, Ill.

Hoefer, E. G., m '05. Professor of Mechanical
Enginering. University of Wyoming, Laramie, Wyoming.

Hoelz, J. B., e'06. Electrical Engineer, General Electric Co., 934 Monadnock Bldg., Chicago, 111.

Hoeveler, J. A., e'11. With National X-Ray Reflector Co., Chicago, Ill.
Hoffman, A. W., ch'08. Assistant Superintend

ent, Dillingham Mfg. Co., Sheboygan, Wis.
Hoffman, E. R., c'12. Engineer, Washington
State Highway Dept., Olympia. Wash.
Hoffman, F. J., c'11. Erecting Dept., American
Briddge Co. of New York, Box 25. West Du-

luth, Minn. Hogan, J. J. e'99. Designing and Consulting Engineer. 21-23 E. Grand Avenue, Chippewa Falls, Wis.

Hohnbach, Robt., m '88. 1911 Raynor Avenue. Joliet, Ill.

Holben, M. W., e'07. Contractor, 828 Jackson St., Gary, Ind. Holbrook, H. E.,

ch '12. Chemist Goldsmith Smelting and Refining Co., Chicago, Ill.

Holloway, D. C., m'04. Building Superintendent, Chicago, Telephone Co., 230 Washington St.,

Chicago, Ill.
Holmes, H. M., c'08. Superintendent, Graff Construction Co., 553 Empire Bldg., Seattle, Wash.

Holmes, W. R., c'11. Conduit Inspector, Room 614, City Hall, Chicago, Ill.

Holt, F. W., c'85. Assistant Examiner, Roo 133, U. S. Patent Office, Washington, D. C.

Holt, Thos., e'07. Signal Inspector, Pennsyl vania Lines West, 6714 Indiana Ave., Chicago, Ill.

Holverscheid, E., m'12. With Peoples' Gas and Coke Co., Chicago, Ill. Residence: Hinsdale, III.

Holverscheid, R. M., '11. With Barker coal., Hinsdale, Ill.

Hope, S. N., m '09. Chief Inspector, A. O. Smith, 27th Street Plant, Milwaukee, Wis.

Hopper, C. Van. E., c'05. Engineer 1135 Mar-

Hopper, C. Van. E., c'05. Engineer 1135 Marquette Bldg., Chicago, Ill.
Horn, F. W., m'13. Erecting Engineer, Vilter Mfg. Co., Milwaukee, Wis.
Horneffer F. C., c'10. Draftsman, Mc Clintic-Marshall Construction Co., Pittsburg, Pa.
Horstkotte, E. H., e'12. Testing Dept., General Elecric Co., Schenectady, N. Y.
Hoskin, A. J. m '90. M. E. '05. Mining Engineer, Commonwealth Bldg., Denver, Colo.
Hoskins, L. M., c'83., C. E., '86. Professor of Applied Mathematics Stanford University, Palo Alto, Cal.

Palo Alto, Cal.
Hosler, H., e '08. See Lynn H. H.
Hotchkiss, W. O., g '03. C. E. '08. State Geologist, Madison Wiss.

Hover, W. A., min '77. With W. A. Hover and Co., Wholesale Druggists, 14th and Lawrence

Sts., Denver, Colo.

Howland, H. P., m'03. Superintendent of Blast
Furnaces, Wisconsin Steel Co., South Chi-

cago, Ill.
Howson, E. T., c'06. Civil Engineering Editor, "Railway Age Gazette", 607 S. Dearborn St., Chicago, Ill.

Howson, L. R., c'08 C. E. '12. Assistant Engineer, Alvord & Burdick, 1417 Hartford Bldg., Chicago, Ill. Hoyt, R. S., e'05. Electrical Engineer, Amer-

ican Telephone and Telegraph Co., 15 Dey St., New York City.

Hoyt, R. S., m'11. With H. W. Johns-Manville Co., Milwaukee, Wis. Hoyt, W. A., c'00. Consulting Engineer. 455

Old Colony Bldg., Chicago Ill.

Hubbard, E. P., e '07. With Vilter Mfg. Co.
Clinton St., Milwaukee, Wis.

Huels, F. W., e '03. Merchant. 115 State Street,
 Madison, Wis.
 Hughes, R. D. c '13. Assistant Sales Manager,

Federal Sign System, Chicago, Ill.

Hull, I. W., e '09. Superintendent of Shops and Garage, Chicago Telephone Co., 1521 W.

Harrison St., Chicago, Ill. Humphrey, C. W. e'00. Consulting and Designing Engineer, 818 The Roockery, Chicago, Ill. Hunner, E. E., c'00, C. E., '07. General Superintendent, Great Northern Iron Ore Properties,

610 Sellwood Bldg., Duluth, Minn.

Hunner, H. H., g '09. Chief Engineer, Meridan
Iron Co., Hibbing, Minn.

Hunt, H. J., c '06. C. E. 12. Hydraulic and
Stoructural Engineer with Daniel W. Mead,

Stoructural Engineer with Daniel W. Mead, 530 State Street, Madison, Wis.
Huntington, E. E., e '00. With Ohio Electric Car Co., Toledo, Ohio.
Huntley, L. H., c '08. Engineer for Robert Russell, Contractor, Valier, Mont.

Hurd, J. T., c '01. De Pue, III.

Hurd, N. L., m'01. Assistant General Superintendent, American McKenna Process Co., Joliet, Ill.

Hutchinson, F. P., e'11. Electrical Engineer, Cutler-Hammar Mfg. Co., Milwaukee, Wis.

Iakisch, J. R., C '11. Engineer, U. S. R. S., Powell, Wyoming. Iakisch, Robert, c'10. Junion Engineer, U. S.

Engineer's Office, Dubuque, Ia.
Icke, J. F., c'00. Contractor. 205-206 Washing-

ton Bldg., Madison, Wis. Ilgner, H. F., e '11. Distribution Dept., Eastern Michigan Power Co., Jackson, Mich.
 Inbusch, H. S., e '05. Dahlman & Inbusch Co., 293 E. Water Street, Milwaukee, Wis.

Inbusch, W. H., e'05. Horticulturist. Box 11,

Darby, Mont.

Irving, T. J., c'05. Assistant Engineer, C. & N.
W., Ry., Clyman, Wis.

Ives, F. W., m'09. Instructor in Engineering
Drawing, Ohio State University, Columbus,

Ohio.

Jacob, E. A., c'13. Engineer, Wheelwright Con-struction Co., Provo, Utah.

Jacobs, E. R., m'05. Sales Engineer, Simplex Electric Heating Co., 15 South Desplaines St., Chicago, Ill. Jacobson, C. J., m '12. Engineer, Farris Bridge

Co., Alderson Stephenson Bidng., Charleston, W. Va.

Jacobson, Ernst, g'06. Gas Production Engineer, Public Service Co. of Northern Illinois, Oak Park, Ill. James, B. W., m '97. Managing Engineer, James-

Bent Irrigation Co., Gila Bend, Ariz. James, O. B., m'91. Hardware Merchant. Rich-

land Center, Wis. Jamieson, J. R., c'12. With Jamieson Bros. Co.,

Poynette, Wis.

Poynette, Wis.
Jenista, G. J., e '06. Director, College of Engineering, De Paul University, 1010 Webster Avenue, Chicago, Ill.

\*Jenne, R. D., e '98. Deceased.
Jenson, C. W., c '04. Merchant. River Falls,

Wis. Jerrard, L. P., c'08. Engineer, Railroad and Tax

Commission, Madison, Wis.

†Jessup, W. E., C. E. '12. With Stone and Webster, Big Creek, Cal. Residence: 1005 Brent Avenue., So. Pasadena, Cal.

Johns, E. F., m '09. University Heating Station, Madison, Wis. Johns, F. W. e '13. With Western Electric Co.,

Hawthorne, Ill.

Johnson, A. L., m '03. Secretary, Johnson Chair Co., 4401 W. North Avenue, Chicago, Ill. Johnson, A. R., ch '06. Chemist. P. O. Box 46,

Johnson, A. R., ch '06. Chemist. F. O. Box 40, Madison, Wis.
Johnson, C. A. m '91. President, Gisholt Machine Co., Madison, Wis.
Johnson, C. N., g '08. Electrical Contractor, 947 Washington Blvd., Chicago, Ill.
Johnson, C. N., e '09. Engineer, Westinghouse Electric and Manufacturing Co., East Pittsburg Pa

burg, Pa.

Johnson, F. E., E '09. Instructor in Electrical Engineering, Rice Institute, Houston, Texas.

Johnson F. M., c '06 Engineer, Bureau of Navigation, Manila, P. I.

Johnson, G. L., e '09. Secretary and Treasurer,

Rockford Lindsay Orange Co., Lindsay, Cal.
Johnson, G. M., m'06. Superintendent of Manufacturing. Omaha Gas Co., Omaha Neb.

Johnson, J. H. E '11. With Des Moines City Railway Co., Des Moines, Ia.

Johnson, M., e '11. Engineer, Westinghouse Electric and Manufacturing Co., East Pittsburg. Pa. Johnson, P. B., c'07. Engineer, American Bridge

Co., 1332 Commercial National Bank Bldg., Chicago, Ill. Johnson, P. H., e '09. With Cutler-Hammer Mfg.

Johnson, P. H., e '09. With Cutter-Hammer Mfg. Co., 776 Franklin St., Boston, Mass.

Johnson, R. H., e '13. Testing Department, General Electric Co., Schenectady, N. Y. Home: 358 S. West St., Galesburg, Ill.

Jones, C. A., Jr., e '09. Engineer, General Electric Co., Wainwright Bidg., St. Louis, Mo.

Jones, C. E., c'10. Superintendent of Construc-

tion. 1021 Gem Bldg., Portland Ore.

Jones, G. H., e'97. Power Engineer, Commonwealth Edison Co., 120 W. Adams St., Chicago, Ill.

\*Jones, Richard e '05. Deceased.

Jones, W. N., c '05, C. E., '10. Engineer in charge of Filter Design. City Engineer's Office, Minneapolis, Minn.

Jorstad, O. M., g '04. C. E., '05. Expert, Committee on Terminal Electrification, Chicago Association of Commerce, Chicago, Ill. Residence: 2023 Estes Avenue.

Joyce, P. F., c '93. U. S. Junior Engineer, U. S. Engineer's Office, St. Paul, Minn.

Kachel, W. J. c'08. General Contractor, 505 Robinson Bldg., Racine, Wis. Kahn, G. E., c'04. Chief Engineer, Secretary— Treasurer, Sterling Engineering & Construction Co., 719 Caswell Blk., Milwaukee, Wis. e '11. In plumbing business,

sched, E. A., e Marshfield, Wis.

Kartak, F. A., e'09. E. E., '11. Instructor in Electrical Engineering, University of Wisconsin, Madison, Wis. Kastler, E. L., m'10. Draftsman, Baker Manu-

facturing Co., Evansville, Wis.

Kaulfuss, J. E., c'08. Assistant Professor Civil Engineering, University of Maine, Or-

Kayser, E. M., c. '05. Superintendent of Construction, Mason Hilton Co., 17 Battery Pl., New York City.

Kayser, N. J., g'10. Superintendent Fraser Brace and Co., Cedars, P. Q., Canada.

Keachie, G. R., c'03. C. E., '07. Contracting Engineer, 211 S. Mills St., Madison, Wis. Kearney, Edgar, m'06. With Lidgerwood Mfg.

Co., 349 Dean St., Brooklyn, N. Y. Keator, E. H., g'10. Engineer, Mississippi River

Power Co., Keokuk, Ia. Keene, A. D., e '13. Testing Dep't., General Elec-

tric Co., Schenectady, N. Y. Kehr, C. M. g '05. Auditor, Woodland Co., 1127

First National Bank Bldg., Chicago, Ill. Keller A. D., e'll. Foreign Dept., General Elec-

tric Co., Schenectady, N. Y. Keller, A. E., m'07. Superintendent, Aberdeen

Gas Co., Aberdeen, S. D.

Keller, C. A., e'99. Assistant Electrical Engineer, Commonwealth Edison Co., 28 N. Market St., Chicago, Ill.

Keller, R. A., e '13. Assistant Superintendent, Electrical Dept., Central Illinois Light Co.,

Peoria, Ill.

Kelley, P. J., e'02. Manager Cost and Production Departments, Ohio Brass Co., Mansfield,

Kellogg, R. H., m '12. With Leathem and Smith Towing and Wrecking Co., Sturgeon Bay, Wis.

Kelly, T. F., e'07. Salesman, American Electric Works, 112 W. Adams St., Chicago, Ill.
Kelm, A. C., e'13. Engineer at Municipal Plant, Idaho Falls, Idaho. Home: 627 5th St.,

Home: 627 5th St., Faribault, Minn.

Kemp, W. B., E '11. With Traffic Department, Chicago Telephone Co., Chicago, Ill. Resi-dence: 1411 Thome Avenue.

Kennedy, F. A., g'06. Instructor in Mining Engineering, University of Wisconsin, Madison, Wis.

Kennedy, W. M., min '96. Platteville, Wis. Kerr, H. H., e '11. Automobile Agent. 706 17th

Avenue W., Calgary, Alb., Can.
Ketchum, H. E., g'08. Superintendent of Construction. Graff Construction Co., 603 Creary Bldg., Seattle, Wash.
Ketchum, W. M., e'08. Engineering Inspector,

R. R. Commission of Wisconsin, Madison, Wis.

D. H., e'06. Engineer, Michigan State Keyes, Telephone Co., Detroit, Mich.

Kiehl, W. P., e'97. Chief Engineer, Corporation of Trinity Church, 310 Hudson St., New York, N. Y.

Kifer, E. H., e'08. General Superintendent. Madison Gas & Electric Co., 122 E. Main St., Madison, Wis.

King, A. C., m '01. Consulting Engineer, 105 W. Monroe St., Chicago, Ill.
King, L. J., c '98. Consulting Engineer Room 40

Mack Blk., Milwaukee, Wis. King, M. W., c'09. Construction Superintendent, New York State Dredging Co., Powers Bldg.,

Syracuse, New York.

Kinne, W. S., c '04. Assistant Professor of Structural Engineering, University of Wisconsin,

Madison, Wis.

Madison, Wis.

Kirch, C. H., c'12. Bridge Dept., Wisconsin Highway Commission, Madison. Wis.

Kirchoffer, W. G., c'97. C. E., '01. Consulting Engineer, 31 Vroman Bldg., Madison, Wis.

Kirk, A. T., m'06. Erector, Stevens Adamson Mfg. Co., Aurora, Ill.

Kislingbury, H. G., e'08. E. E., '10. Rate Expert, Hodenpyl Hardy and Co., 2004 Dime Savings Bank Bldg., Detroit Mich.

Savings Bank Bldg., Detroit, Mich. agawa, Tometaro, c'11. P. O. Box 295, Madi-

Kitagawa, son, Wis.

Son, W.S.

Klinger, W. A., c'10. Construction Engineer, 20
Mack Blk., Milwaukee, Wis.

\*Klug, J. F., e'07. Deceased.

Knowles, J. H., c'99. Bridge Engineer, Western Pacific Railway Co., San Francisco, Cal. Knuth, T. B., c'08. Chief Engineer, F. and E.

Rnuth, T. B., c vs. Cher Engineer, F. and E. Ry., Fairchild, Wis.

Ry., Fairchild, Wis.

Koch, W. J., m '04. 222 12th St., Milwaukee, Wis.

Koenig, H. H., e '11. Designer, Falk Mfg. Co.,

Milwaukee, Wis.

Koenig, M. C., c '11. Jemez Springs, N. M.

Home: 630 Hamilton St., Wausau, Wis.

Kohl, O. B., e '02. Proprietor and Manager,

Antigo Gas Co., Antigo, Wis. hn, A. J., e '10. Sales Manager, Cracraft, Leich Electric Co., Genoa, Ill. Kohn,

Kommers, J. B., e '06. Assistant Professor of Mechanics, University of Wisconsin, Madison Wis.

Korst, P. B., m'13. Power Plant Dept., T. M. E. R. and L. Co., Milwaukee, Wis. Home: E. R. and L. Co., Milwaukee, Wis. Home: 209 Clark St., Janesville, Wis. Kowalke, O. L., ch '06. Ch, E. '09. Associate Professor of Chemical Engineering, Univer-

sity of Wisconsin, Madison, Wis.

Kozarek, A., c '12. With Wisconsin Highway
Commission, Wood County, National Bank
Bldg., Grand Rapids, Wis.

Kraatz, K. L., m'11. With Wausau Foundry

Bldg., Grand Rapids, Wis.
Kraatz, K. L., m '11. With Wausau Foundry and Machine Shop Wausau, Wis.
Krahn, W. O., c '09. Construction Engineer, International Harvester Co., Milwaukee Wis, Kratsch W. H., m '97. M. E., '08. General Supresident. The Challoner Co., Oshkosh, Wis.
Krell S. A., C '12. Draftsman, C. M. & St. P. 1345
Railway Exchange, Chicago, Ill.
Kremers. J. G., e '98. General Superintendent and Chief Engineer, Wisconsin Sugar Co., 428
Grand Ave., Milwaukee, Wis.

Grand Ave., Milwaukee, Wis.

Kringel, A. E., c'10. Assistant Engineer, Wisconsin Highway Commission, Box 534 Green Bay, Wis.

Krippner, A. F., e'04. General Manager, Missouri Gas Heater and Appliance Co., St. Louis, Mo.

Kroening, R. H. c '12. With Esau-Kroening Construction Co., 483 Reed St., Milwaukee, Wis. Kruell, G. J., C '10. Draftsman, Office of University Architect, 420 N. Charter St., Madison Wis.

Wis

Kruesi, F. E., e'08. Operating Engineer, Illinois Northern Utilities Co., Dixon, Ill.

Krumrey, R. G., e'03. General Superintendent, Beloit Water, Gas, and Electric Co., Beloit, Wis.

Kruse, H. J., g'07. With Saeger Engine Works, Lansing, Mich.

Kryzinski, A. J., e'08. Supervisor of Traffic, Wisconsin Telephone Co., Milwaukee, Wis. Kuelling, H. J., c'08. C. E., '11. County Highway Commissioner, Milwaukee County, Pereles Bldg. Milwaukee Wis.

Kuentz, O. O., m'08. Mechanical Draftsman, Isthmian Canal Commission, Culebra, Canal Zone, Panama.

Kuestermann, W. W., E '09. Instructor in Mathematics, State College of Pennsylvania, State College. Pa.

Kuhl, H. C., C '09. Assistant Engineer, U. S. R. S., Ft. Shaw, Mont.

Kuhns, G. R., e'13. Testman, General Electric Co., Schenectady, N. Y. Home: 117 E. Gor-ham St., Madison, Wis.

\*Kummell, C. H., m '95. Deceased.
†Kurata, K., M. E. '12. Mechanical Engineer. 43
Kitamachi, Takanawa, Tokyo, Japan.
Kurtz, C. M., c '97. Assistant Engineer, Southern Pacific Co., 1136 Flood Bldng., San Francisco

cisco, Cal. Kurtz, E. M., m '94, Treasurer, The Light and De-

velopment Co. of St. Louis. 1122 Wright Bldg., St. Louis, Mo. Kutschera, W J., m '09. Manager and Secretary, Northwestern Storage Battery Co., 140 Mason St., Milwaukee, Wis.

Kwauk, B., C. '12. Kypke, C. H. '08. Field Manager, Roach Fowler Publishing Co., Kansas City, Mo.

Lacey, F. H., e '01. 1616 Green St., Boone, Ia. Lacher, W. S., c '07. Office Engineer, C. M. & St. Paul Ry., Chicago, Ill. Lachmund, Herman, m '09. In Engineering De-

partment, Prescott Steam Pump Co., South

Milwaukee, Wis.

Lademan, O. T., e'97. President and General
Manager, Railway Telephone & Electric Co.,
1362 Monadonck Bldg., Chicago, Ill.

La Dow, C. V., m'06. Manager, The Fredonia
Gas Co., Fredonia, Kan.
Lamont M. R. e'11. In Peal Estate Rusiness

Lamont, M. B., e'11. In Real Estate Business Aberdeen, S. D.

Lampert, B. H., c'13. Manager, L. A. Larson Co., Oshkosh, Wis. Landgraff, F. K., m'98. Superintendent, Flan-

nery Bolt Co., Bridgeville, Pa. Langwill, J. S., m'11. Superintendent, Rockford

Drilling Machine Co., Rockford, Ill.

Langworthy, E. P., m'13. Special Apprentice,
American Steel Foundry Co., Alliance. O.

Lapham, Chas., c'81. District Engineer, C. M. &
St. P. Ry. Union Depot, Milwaukee, Wis.

Lardner, H. A., e, B. S., '93. E. E. '95. Vice President, J. G. White & Co., San Francisco, Cal. Residence: 310 Samson St.

Larkin, F. V. g '06. Assistant Professor of Me-chanical Engineering, Lehigh University, Bethlehem. Pa.

Larsen, A., m '05. Assistant Engineer, Southern New England Ry. Co., 710 Grosvenor Bldg., Providence R. I.

Larsen, H., c'13. Assistant Engineer, with R. L. Adams, City National Bank Bldng., Herrin, Ill. Home: 1517 Charles St., La Crosse, Wis. Larsen, R. L., m '12. Foundry Apprentice. 137 1/4

North St., Auburn, N. Y.
Larson, A. V., m '09. Engineer, American Engineering Co., Philadelphia, Penn.

Larson, C. M., c'05. C. E., '09. Chief Engineer, Wisconsin Railway and Tax Commission, Madison, Wis.

Larson, L. M. c'09. Collection Manager, International Harvester Co., Regina, Sask., Can. Lathrop, L. H., e '04. General Superintendent,

Menomonie and Marinette Light and Traction

Co., Marinette, Wis.
Lathrop, W. F. e '02. Engineer, T. M. E. R. and
L. Co., Room 316, Public Service Bldg., Mil-

waukee, Wis.
Lauderdale, J. E. e '11. With National X-Ray
Reflector Co., 235 W. Jackson Blvd., Chicago, Ill.

Laurgaard, O., c'03. Irrigation Engineer, Tu-

malo Project, Laidlaw, Ore. Lautz, G. H., c '08. Topographi Forest Service, Missoula, Mont. Topographic Draftsman,

Lawrence, F. H., e'11. Special Inspector, Chi-cago Telephone Co., 212 Washington St., Chicago, Ill.

cago, 111.

Lawrence, F. W., c'06. Sales Agent, A. O. Smith Co., Detroit, Mich.

Lawton, E. W., m'89. Secretary C. A. Lawton Co., De Pere, Wis.

Lea, H. L., e'03. Salesman, United States Sale Development Co., Moline, Ill.

Lea, J. M., e'02. Superintendent, Hoskins Mfg.

Co., Detroit, Mich.

Co., Detroit, Mich.
Leasman, E. L., ch. '07. Ch. E. ,'13. Boscobel, Wis.
Lee, Allan, g '04. Assistant City Editor, Wall
Street Journal, 44 Broad St., New York City.
Lee, Norman, e '04. Mechanical Engineer, Thompson Houston Co., Compagnie Generale,
Thompson-Houston, Rue de Vaugirard, Paris,
France France.

France.

Legg, E. F., e '01. Superintendnt of Construction, Long Branch Gas and Electric Co., 176
Broadway, Long Branch, N. J.

Legreid, H. N., ch'08. Drainage Engineer,
Stoughton, Wis.

Leich, O. M., e '98. Secretary and General Manager, Cracraft, Leich Electric Co., Genoa, Ill.

Lemon, L. E., e '96. Manager, Vindex Electric
Co., Aurora, Ill.

Lennon, H. D., g'02. Sales Engineer Ministerior

Lennon, H. D., g '02. Sales Engineer Minneapolis Steel and Machinery Co., 2924 Minnehaha Avenue, Minneapolis, Minn.

Lent, W. F., e '10. E. E., '11. Electrical Engineer Cutler-Hammer Mfg. Co., Milwaukee.

Wis.

†Leschke, A. H., C. E. '13.
Lewis, R. D., m '09. Assistant Engineer, Robinson, Cary & Sands Co., St. Paul, Minn.
Lewy, Daniel, m '05. Western Representative,
Standard Plunger
Elevator Co., 615 Schiller

Bldg., Chicago, Ill. Li, Ming-ho, ch'13. Research Chemist, Amer-

ican Rolling Mill Co., Middletown, O.
Libby. L. M., e '07. With Northwestern Electric
Co., Portland, Ore.

Co., Portland, Ore.
Lidral, J. F., c'10. With V. C. Suckow, Consulting Engineer, 315 Crown Bldg., Vancouver, B. C.

ver, B. C.
Lieber, W. H., m'07. Patent Attorney, Allis-Chalmers Co., Milwaukee, Wis.
Lightbody, J. N., e'11. Engineer, Municipal Electric Light Dept., Galgary, Alb., Can.
Lindemann, W. C., m'08. Assistant Superintendent, A. J. Lindemann and Hoverson Co., Milwaukee, Wis.
Lindemann, A. S., m'85. M. E.'87. Manager, Milwaukee-Waukesha Brewing Co., P. O. Roy, 194 Milwankee, Wis.

Rox, 194 Milwaukee, Wis.
Linden, O. J., c'00. Deceased.
Linley, F. H., m'10. Steam Turbine Dept., Allis-Chalmers Co., Milwaukee, Wis.
Lisberger, S. J., e'03, E. E.'09. Engineer of

Electric Distribution, Pacific Gas & Electric Co., San Francisco, Cal.
Liver, H. A., c'08. Engineer, Oliver Iron Mining Co., Chisholm, Minn.

Livingston, J. K., E. '13. With American Telephone and Telegraph Co., 15 Dey St., New York City. Lloyd, C. C., c'96. Lawyer, 625 Caswell Block,

Milwaukee, Wis.

Lloyd, E. J., e'08. Sales Engineer, Western Electric Co., 131 Simcoe St., Toronto, Ont., Can. Loesch, R. L., e'07. Ranch Manager, Montrose,

Colo.

Loew, E. A., e'06. Assistant Professor of Electrical Engineering, University of Washington, Seattle, Wash.

Logeman, R. T., c '99. Engineer, American Bridge Co., Commercial National Bank Bldg., Chi-

Co., Commercial National Bank Blags, cago, Ill.
Lokke, J. H., e '08. Merchant, Baldwin, Wis.
†Lora, M. R., C. E. '12.
Lorig, F. W., m '13. Draftsman, West Penn.
Traction Co., First National Bank Bldng.,
Pittsburgh, Pa. Home: So. Milwaukee, Wis.
Lowe, C. W., e '09. With Western Electric Co.,
463 West St., New York City.
Lowell, J. W., Jr., c '11. Assistant Engineer,
Universal Portland Cement Co., 72 W. Adams

Universal Portland Cement Co., 72 W. Adams St., Chicago, Ill.
cas, F. B., ch'13 Chemist, Armour and Co.,
Chicago, Ill.

Lucas,

Lucas T. J., e '07. With W. A. Baehr Consulting Engineer, 2009 Peoples Gas Bldg., Chicago, Ill.

Bridge Co., Gary, Ind.
Lueders, Carl, c'11. Engineer, Laclede Gas Co.,
St. Louis, Mo.
Luedke A T. Luedke, A. L., c'10, C. E.'13. Engineer Highway Commission, Madison, Wis. Engineer, State

L., m'97. Constructing Engineer. E.

North Yakima, Wash.
Lueth, P. F., m '98. Chief Draftsman, Summer
Iron Works, Everett, Wash.
Luick. A. J. m '07. With W. A. Baehr, Consulting Engineer, 2009 People's Gas Bldg., Chicago, Ill.

Lunde, S. G, c '08. Assistant Topographer, U. S. G, S., Washington, D. C. Lupinski, O., c '10. With McClintic Marshall Construction Co., Pittsburg, Pa.

Lutze, H. F., e '08. Engineer. Las Animas, Colo. Lynch, H. C., e '13. Ass't Supt. Concrete Con-struction, Hillsboro, Ill. Home: Inde-pendence, Ia.

Lynn, Harry Hosler, c '08. Electrical Engineer. Lynn Haven, Fla.

Lyons, B. F., m'03. General Manager, Water, Gas & Electric Co., Beloit, Wis. Mabbett, W. F., c'12. Dealer in Leaf Tobacco,

Edgerton, Wis.

Macaraeg, J. G., c"11. Binalonan, Pang., P. I. MacArthur, Donald, m. '04. Superintendent of Manufacture, Laclede Gas Light Co., 716 Locust St., St. Louis, Mo.

MacArthur, A., m '11. With Minneapolis Gas Light Co., Minneapolis, Minn.

MacGregor, W. F., m '97. M. E. '98. Superintendent of Experimental Dept., J. I. Case Threshing Machine Co., Racine, Wis.

MacMillan, H. S., m '05. District Master Mechanic, C. M. & St. P. Ry., Minneapolis, Minn.

Madsen, F. H. min '13. With Oliver Iron Mining Co., Virginia, Minn Magdsick, H. H., E '10. Engineer, National Lamp Works of General Electric Co., Nela Park, Cleveland, Ohio.

Mainland, Jas., E '11. Chief Electrician. U. S. Coal & Oil Co., Holden, W. Va. Mainland, John m'07. Chief Inspector, J. I. Case

Threshing Machine Co., Racine, Wis.

Maldaner, Arthur, c'96. Engineer & Contractor. 30 N. La Salle St., Chicago, III. Malec, Anton, m'98. In Tool Drafting Depart-

ment, Western Electric Co., Hawthorne, Ill.

Manchester, T. H., m '06. With Chicago Car Heating Co., 1450 Railway Exchange, Chicago,

Manegold, F. W., g'07. With Briggs and Stratton Co., Milwaukee, Wis.
Manegold, J. R., e'13. With American Telephone

and Telegraph Co., 15 Dey Street, New York City.

Manegold, R. A., m '06. Secretary, Dings Electro-Magnetic Separator Co., South Milwaukee. Wis.

Mann, C. A., ch'09. Instructor in Chemical Engineering, University of Wisconsin, Madison, Wis.

Mann, F. H., c'05. Superintendent, Bates Rogers Engineering and Construction c '05. Superintendent, Bates Turners Falls, Mass.

Manor, E. R., e '09. With Northern Pacific Railway, St. Paul, Minn.
Marks, F. R., e '06. Engineer, Central Group of

Bell Telephone Cos., 212 Washington St., Chicago, Ill.

Markwardt, L. J., c'12. Assistant Engineer, S. Forest Products Laboratory, Madison, Wis. Martin, A. H. e '09. Chief Draftsman, Kissel Car

Co., Hartford, Wis.
Marvin, A. B., e '00. Patent Actorney, 1020 Mar-

Marvin, A. B., e '00. Patent Attorney, 1020 Marquette Bldg. Chicago, Ill.

Mason C. T., m '99. Assistant Chief Engineer,
Joliet Works, Illinois Steel Co., Joliet, Ill.

\*Mathews, Oliver, min '76. Deceased.

Mathews, W. W., c '08. With Sanitary District
of Chicago, 700 Karpen Bldg., Chicago, Ill.

Maurer, E. R., c '90. Professor of Mechanics,
University of Wisconsin, Madison, Wis.

May, A. E., c '11. Draftsman, Bridge Dept.
Northern Pacific Ry., St. Paul, Minn.

Mayer, August, c '83.

Mayer, August, c'83.

McArthur, A. R., m '00. Resident Manager, Gary Works, American Sheet and Tin Plate Co., Gary, Ind.

McCollister, M. S., c C. E. 12. Civil Enginee International Life Bldg., St. Louis, Mo. Civil Engineer, 801

McComb, R. K. g '09. Assistant Engineer, U. S. R. S., Harden, Mont.

McCoy, L. B., e'06. Manager, Tri-City Shoe Co., Minneapolis, Minn.
\*McCulloch, A. L., c'95. Deceased.
McCulloch, J. A., g'07. Superintendent, Vinegar

Hill and Unity Mines, Box 412, Galena, Ill. McCullough F. M., c'03. Assistant Professor of Mechanics, Carnegie Technical Schools, Pitts-

burgh, Pa.

McDonald, Clinton, c '97. North Mankato, Minn.

McDonald, H. L., c '04. Engineer U. S. G. S.,

Washington, D. C.

Chemist, Newport Tur-

pentine and Rosin Co., Bay Minette, Ala.

McEachron, E. J., m '04. Superintendent, Fuller
& Johnson Manufacturing Co., Madison, Wis.

McEachron, W. H., m '13. Testing Engineer,

Roskford, Ill.

Emerson-Brantingham Co., Rockford, Ill. McEvoy, G. E., m'02. District Manager, Pitts-burgh Testing Laboratory, 210-211 Bell

Block, Cincinnati, O.

McFarland, M. F., c'13. U. S. Inspector U. S.
Engineer's Office, Keokuk, Iowa.

McIntosh, F. C., c'13. In Track Elevation Office,
Pennsylvania R. R. Co., So. Chicago, Ill.

McKim, J. A., c'91. Vice-President, Wilcox-McKim Co. Saginaw Mich.

Kim Co., Saginaw, Mich. McLean, J. C., c'13. County Engineer, Cedar Co.,

Tipton, Ia. McLean, J. D., m'11. With U. S. Forest Products Laboratory, Madison, Wis.

McLean, H. C., m '08. Production Engineer, Atlantic Refining Co., 3144 Passyauk Ave., Philadelphia, Penn.

McMullen, C. L., e'09. Sales Engineer, Fuller

& Johnson Mfg. Co., Madison, Wis.
McMullen, V. E., e '05. Superintendent Gas Engine
Shop, Field Brundage Co., Jackson, Mich.
McNaughton, G. c '09. With U. S. Forest Service
1302 6th St., Wausau, Wis.

McNown, W. C., c'03. Assistant Professor of Civil

Engineering, University of Kansas, Lawrence, Kan. McWethy, F. H., m '05. With Stephens-Adamson Manufacturing Co., Aurora, Ill. McWethy, H. E., e '09. Engineer, Wisconsin

Railroad Commission, Madison, Wis.

Mead, G. A., e '95. Factory Manager, The Ohio Insulator Co., Barberton, O.

Mead, O. A., c '92. Registrar, Lawrence College, Appleton, Wis. Mead, W. J., g '06. Assistant Professor of Geology, University of Wisconsin, Madison, Wis. Meadowcroft, M. T., c'07. Structural Engineer, Marshall and Fox, Chicago, Ill. Residence: 2418 Wilson Avenue. Mears, G. S., c'12. With Plankinton Packing Co.,

Milwaukee, Wis.

Meinicke, A. E., e'10. With Chicago Telephone Co., 212 Washington St., Chicago, Ill.

Meinicke, F. Jr., Min. '12. Mining Engineer, Michigan Utah Mine, Alta, Utah.

Melcher, A. G., m'08. Assistant Engineer, Hoskins Manufacturing Co., 453 Lawton Ave., Detroit, Mich. Melin, O. W., c'10. Instrumentman, Washington

Bayou Drainage District, Leota Landing,

Melville, James, c'75. Superintendent of Paving and Construction. 708 Sommers Ave., Madi-

son, Wis.

Mengel, F. F., c'12.

Merkel, R. H., c'13. Home: Sauk City, Wis.

Merkin, A. L., c'10. Inspector, Board of Water Supply, New York City. Residence: 2012 Vyse Avenue.

Merrell, G. C., C '10. Surveyman. General Delivery, San Francisco, Cal. Home: 302 Elm St., Ripon, Wis.

Merriam, H. N., c'98. Division Engineer, Pacific Great Eastern Ry., Vancouver, B. C. Can.

Merrick, E. G., e '00. Turbo-alternator Designer, Cie Franca'se Thomson Houston Lesquin les Lille, Nord, France.

Merrill, P. C., g'09. Mining Engineer, Aurora. Minn.

g '04. Superintendent,

Light and Power Co., Republic, Wash,
Merriman, W. N., min '81. Geologist, Oliver Iron
Mining Co., 202 Wolvin Bldg., Duluth, Minn.
Meyer, A. F., c '05. C. E. '09. Consulting Engineer, 1000 Germania Life Bldg., St. Paul, Minn.

Meyer, E. W., m '95. General Manager, Feilbach Motor Co., Milwaukee, iWs. Meyer, H. W.,Jr. e '08. Vice-President, Langstad-

Meyer Construction and Supply Co., Appleton, Wis.

Meyers, A., e '01. E. E. '06. Soda Springs, Idaho. Middleton, O. W., g '07. Associate Editor, "Rail-way Master Mechanic". 431 S. Dearborn St.. Chicago, Ill.

Miller, A. H., m '05. With Globe Foundry Co., Sheboygan, Wis.

Miller, B. E., c'11. Instructor in Electrical Engineering, University of Wisconsin, Madison, Wis.

Miller, E. B., e'03. Sales Engineer, 70 First St., Portland, Ore.

Miller, E. B., e'06. Superintendent, Chemical Co., 601 Keyser Bldg., Baltimore, Md. Miller, J. E., e'13. Superintendent, Brodhead

Electric Light Co., Brodhead, Wis.

Miller, L. W., c'10. Assistant Engineer, C. & W. I. R. R. 6241 Woodlawn Ave., Chicago, Ill. Miller, W. B., g '07, c '08. Engineer, Blaw Steel Construction Co., Pittsburgh, Pa.

Milliren, B. L., Jr., m '09. Manager, Brandon Gas and Power Co., Brandon, Man., Can.

Minch, J. H., m '92. Merchant. 224 W. Gorham St., Madison, Wis.

Minch, O. F., m'93. Manager, The Flouring Mills Co., Odessa, Wash. Minch, W. B., m '00. Merchandise Dept., Western

Electric Co., Hawthorne, Ill.

Minich, W. G., e'09. With Rio Janeiro Tram-way Light and Power Co. Rio Janeiro, Brazil.

After June 1, 1914, address at De Pere, Wis.

Mitchell, A. R., c'09. Draftsman, A. T. & S. F.

Ry., Room 1000 Railway Exchange Blag., Chicago, Ill.

Moeller, Roland, m'09. Proprietor "Auto Service" 310 Lee St., Milwaukee, Wis. Moles, E. S., e'05. Engineer, Chicago Telephone

Co., Chicago, III. Residence: 295 Clinton Pl., River Forest, Ill.

Monaghan, J. J., c'95. Contracting Engineer, The Filer & Stowell Co., Milwaukee, Wis. Residence: 382 La Fayette Pl.

Moody, R. E., e 13. Electrical Engineer, T. M. E. R. and L. Co., Milwaukee, Wis. Home: 143 4th St.

Moore, L. E., m '00. Bridge and Signal Engineer, Massachusetts Public Service Commission, 1 Beacon St., Boston, Mass. Moore, R. S., m'11. With Beloit Gas and Electric

Co., Beloit. Wis. Moore, Sherman, c'02. C. E.'07. Junior Engineer, U. S., Lake Survey, Old Custom House, Detroit, Mich.

Moorehouse, L. B., m '04. With Doherty Operat-in Co.: 60 Wall St.. New York City. †Moots, E. E., C. E. '11. Instructor in Applied Mathematics, Whitman College, Walla Walla, Wash.

Morgan, A. W., c '09. Superintendent, Electric Distribution Dept., Meridian Light and Ry.

Co., Meridian, Miss.

\*Morgan, G. E., c'80. Deceased.

Morgan, E. K., m'13. Chief Draftsman, Rockford Drilling Machine Co., Rockford.- Ill.

Home: 821 N. Mariposa Ave., Los Angeles, Cal.

Morgan, W. D., g '05. Manager, Morgan Lumber Co., Hawkins, Wis.

Co., Hawkins, Wis.

Moriarty, E. W., e '08. Manager, Colonial Candy Co., 131 Killingsworth Ave., Portland, Ore.

Moritz, C. J., c '11. General Manager, Modern Paving Co., West Allis, Wis.

Moritz, E. A., c '04. C. E. '05. Assistant Engineer, U. S. R. S., Washington, D. C.

Moroney, James, c '73. Deceased.

Morrison, R. H., m '03. Assistant Chief, Service Dept. Mineral Paint Zing Co. Depug. III.

Morrison, R. H., m'03. Assistant Unier, Service Dept., Mineral Point Zinc Co., Depue, Ill. Morrisey, P. W., m'05. Designer, J. I. Case Threshing Machine Co., Racine, Wis. Mors, G., C., m'92. M. E. '00. Los Gatos, Cal. Morrow, F. E. c'92. Structural Draftsman. North Milwaukee, Wis. Morton, J. D., e'08. Manager, Conconully Light and Water Plant, Conconully, Wash.

Moser, A. L. B., c'06. With U. S. R. S., Mon trose Colo.

Moss, L. M.,e '09, E. E. '13. With General Electric Lamp Co., Harrison, N. J.
Mott. W, R., ch '03, ch. E. '08. With National

Carbon Co., Cleveland, O.

Moyer, W. D.,m'12, M. E.'13. Cadet Engineer Denver Gas and Electric Co., Denver, Colo. Muckleston, R. W., g'09. Superintendent of Railroad Construction, Wendling, Ore. Muehl, W. R., e'09. With Woods Motor Vehicle Co., 2510 Calumet Avenue, Chicago, Ill. Muehlstein, W. C., c'09. Engineer, Railroad Commission of Wisconsin, Madison, Wis. Mueller B. H., m'11. With American Sheet and

Mueller, B. H., m '11. With American Sheet and Tin Plate Co., 1302 Frick Bldg., Pittsburgh,

Muir, R. C., e'05. With Power and Mining Department, General Electric Co., Schenectady,

N. Y.
Munger, E. T., e '92. General Superintendent,
Hudson and Manhattan R. R. Co., 30 Church
Street, New York City.

\*Murroe, Wm., c '78. Deceased.

Murphy, F. H., e '04. Illuminating Engineer,
Portland Railway, Light and Power Co.,
Portland, Ore.

Murphy, M. N., e '01. Superintendent of Construction, Johnston Electric Co., 1207 Harvey

St., Omaha, Neb.
Murray, H. E., m'10. 413 J. Avenue, Superior,

Wis.

Murrish, W. U., E. '11. With Sierra and San Francisco Power Co., Modesta, Cal. Musil, L. F., e'04. Office Manager, Henry L. Doherty & Co., 60 Wall St., New York, N. Y. Musser, J. M., e'04. With Central Illinois Public

Service Co., Mattoon, Ill.

Nance, A. W., e'10. Erecting Engineer, Farris Bridge Co., 8043 Jenkins Arcade Bldg., Pittsburg, Pa.

Natwick, F. J., e '09. Electrical Contractor, Grand Rapids, Wis.

Nee, T. G., e '99. Vice-President, Mexican Telegraph and Telephone Co., Mexico City, Mexico, 3 San Felipe Nere Num No. 93.

Neef, J. H., c'04. Bridge Engineer, Room 17 Lumberman's Bank Bldg., Hoquiam, Wash Nelson, C. L., c '00. Engineer, U. S. Geological Survey, Washington, D. C.

Survey, Washington, D. C. Nelson, E. B., c '13. Draftsman. Canal Commission, Paraiso Shops, Paraiso, C. Z.

Nelson, F. W., m '97. Deceased.

Nelson O. H., c'08. Assistant Topographer, U.

S. G. S., Washington, D. C. Nethercut. E. S., c '89. Member of Parmley & Nethercut, Consulting Engineers, 1517 Monadnock, Block, Chicago, Ill. Residence: 705 Michigan Avenue, Evanston, Ill.

Newbury, R. C., e '12. Cadet Engineer, Denver Gas and Electric Co., Denver Colo.

\*Newman, F. J., e '98. Deceased.

Newman, H. J., e '10. With Maynard & Picken.

Real Estate, 702 Wells Bldg., Milwaukee, Wis. Newton, G. C., m'07. Engineer in Charge of Construction, Newton Engineering Co., Majestic Bldg., Milwaukee, Wis.

Nickell, G. H., c'11. Engineer, Wisconsin Highway Commission, Madison, Wis.

Nicolaus. A. A., e'01. Electrician, P. O. Box 462, Billings, Mont. Nicolaus, A. W., c'04. Farmer. Griffin, N. D. \*Noe, E. J., e'06. Deceased. Nicolaus.

\*Noe, E. J., e 60. Deceased.

\*Nommenson, R. A., c '99. Deceased.

Nordberg, B. V., E., m '07. Assistant Engineer,

Nordberg Manufacturing Co., Milwaukee, Wis.

Norris, L. A., E. '12. With General Electric Co., Schenectady, N. Y.

†North, W. A., C. E. '11. With Lade Gas Light Co., St. Louis, Mo.

†Nottingham, A. R., M. E. '10. Instructor in Mechaical Engineering Purdle University Lafayette, Ind.

Noyes, E. C., c'13. Assistant Superintendent, Dunphy Fridstein Co., 812 Majectic Bldg., Milwaukee, Wis.

Noyes, J. D., c'04. Sales Engineer, Edison Il-

luminating Co., Detroit, Mich.

Nuti, C. B., e'10. Induction Motor Engineering
Dept., General Electric Co., Schenectady, N. Y. Oakes, F. H., c'08. Engineer, The Arnold Co., 105 S. La Salle, Chicago, Ill.

Ochsner, R. J., e'94. Physician, Charity Hospital, 2091 E. 90th St., Cleveland, O. Oehler, A. G., e '11. Wireman, Northern Pacific Ry., 401 Northern Pacific Bldg., St. Paul,

Minn.

Older, Clifford, c'00. Bridge Engineer, Highway Commission, Springfield, Ill.
Olson, A. C., c'02. Assistant Engineer, Kansas
City Terminal Ry. Co., Kansas City, Mo.

Olson, E. A., e '07. District Traffic Chief, American Telephone and Telegraph Co., 644-6 Brandeis Theater Bldg., Omaha, Neb.

Olson, H. M., e '05. Mechanical Engineer, The Kennicott Co., Chicago Heights, Ill. Olson, L. W., e '99. Superintendent, The Ohio

Brass Co., Mansfield, O.
Olson, M. C., e '99. Electrical Engineer, General Electric Co., Schenectady, N. Y.
Olson, N. T., c '10. Assistant Engineer, U. S. R.

S., Glasgow, Mont.

\*Olson, Sidney, c'02. Deceased.

Omara, E. H., c'04. Manager, Omara Parlor Frame Co., 2114 Austin Avenue, Chicago, Ill. O'Neill, W. R., m'87. Master Mechanic, Payette

Valley Railway Co., Payette, Idaho. Orbert, E. G., c'05. City Engineer, West Allis. Wis.

Ordway, A. B., c'09. Engineer with H. T. Kaiser, Paving Contractor, Vancouver, B. C.

Orr, L. B. e '09. Farmer, Bagley, Wis. †Ort, A. A. L., C. E. '12. Engineer, Municipal Supply Co.. Western Union Bldg., Chicago, 111

Osgood, Charles, m'07. Engineer, Garner Ventilating Co., 502 Hearst Bldg., Chicago, Ill. Ostenfelt, C. L., c'85. Engineer, Oscar Daniels

Co., Woolworth Bldg., New York City. Osthoff, O. P., c'10. Structural Engineer, Dumphy Fredstein Co., Majestic Bldg., Milwaukee, Wis.

Outzen, A N., e'10. Engineer, Madison Gas & Electric Co., Madison, Wis.

Owen, Llewelyn, e'97. Superintendent, Electrical Department, Central Illinois Light Co., Peoria, Ill.

Owen, R. S., c'04. Instructor in Topographic Engineering, University of Wisconsin, Madison. Wis.

†Pace, D. P. C. E. '11. Assistant Engineer, St. L. B. and M. Ry., Frisco Office Bldg., Kingsville, Texas.

Paesler, F. E., e'08. Engineer, Western Electric Co., Hawthorne, Ill.

Page, H. A., m'12. Special Apprentice, Island Ry. Co., Cedar Rapids, Ia. Home: Prairie du Sac, Wis. Paine, J. P., c'77. 745 Van Buren St., Milwau-

kee. Wis.

Palmatier, H. P., e'12. Engineer, Natwick Electric Co., Grand Rapids, Wis.

\*Palmer, A. H., e '96. Deceased.

Palmer, G. H., e '07. 301 N. Benton St., Sparta,

Wis.

Palmer, Ray, e'01 Commissioner of Gas and Electricity City Hall, Chicago, Ill. Parker, E. E., c'07. City Engineer, Madison.

Wis. Parker, F. I., e '06. Engineer, Cuter-Hammer

Mfg. Co., Milwaukee, Wis.

Parker H. A., c'08. Engineer, Knoxville, Power Co., Alcoa, Tenn.

Parker, W. C., g'06. Secretary, The Mueller &

ker, W. C., g'06. Secretary, The Mueller & Son Co., 445-475 Canal St., Milwaukee, Wis.

Parks, R. R., e'12. Assistant Foreman, Track Dept., C. M. & St. P. Ry. Residence: Fre-donia, Wis.

\*Parman, A. L., c'85. Deceased.

Parmley, W. C., m'87, With Parmley and Nethercut. 45 E. 17th St., New York City. cr, C. H., m '96. Secretary, Hart-Parr Co., Charles City, Iowa.

\*Parr, T. W., m'81. Deceased.
Parsons, W. J., c'00. Superintendent of Construction, American Bridge Co., 30 Church St., New York City.

Paulus, E. J., c'11. Contracting Engineer, Mc Clintic-Marshall Construction Co., 1214 First

National Bank Bldg., Chicago, Ill.
vling, R. A., m '09. Treasurer, Pewaukee
Lake Ice Co., 2003 Grand Avenue, Milwaukee, Pewaukee Pawling, R. Wis.

Pearsall, A. C., m '10. Contracting Engineer, Des Moines Bridge and Iron Co., Des Moines Iowa.

Pearsall, W. G., m'11. Mining Engineer, Pickands, Mather and Co., Gilbert, Minn. Residence: Elba Club.

Pease, B. S. c '07. With Concrete Reinforcement Dept., American Steel & Wire Co., 72 W. Adams St., Chicago, Ill.

Peck, B. H., e'06. City Telephone Supervisor, Telephone Bureau of The City of Chicago,

Chicago, Ill. Peck, O. K., g'07. Assistant Bridge Engineer, Grand Trunk Pacific Ry., Winnepeg, Man., Can.

\*Pengra, P. W., '02. Deceased.

Penn, W. C., c'07. Resident, Engineer, Knoxville Power Co., Alcoa, Tenn.

Pennock, H. W., m'83. Bldg., Seattle, Wash. m '83. Attorney, 908 Leary

Peotter, R. S., c'05. C. E., '09. Managing Engineer, Knoxville Power Co., Alcoa, Tenn.

Pergande, A. A., e'10. Ass't Manager, Trumbull Mazda Lamp Division of General Electric Co.,

670 W. Market St., Warren, O. Perkins, J. H., e'96. Engineer, Susquehanna Railway Light and Power Co., 40 Wall St., New York City.

Perkins, W. D., e'05. Dealer in Motorcycles and Bicycles, Santa Mana, Cal.

Perry, C. H., c '03. General Inspector of Bridges, C. & N. W. Ry., 226 W. Jackson Blvd. Chicago, Ill.

Perwien, Richard, c'08. Examiner of Efficiency. Civil Service Commission, City Hall, Chicago, Ill.

A. G., m'13. Apprentice, Chain Belt Co. Peter. Milwaukee, Wis.

Peters, C. S., e '05. Engineer, Laclede Gas Light Co., St. Louis, Mo. Petrie, W. W., g '10. With Petrie Transfer and Storage Co., 160 Cherry St., Fond du Lac,

Wis. Pettibone, I. F., g'09. Draftsman, Kansas City

Terminal Ry., Kansas City, Mo.

Petura, F. J., e '04. Engineer, Henry L. Doherty and Co., 60 Wall St., New York City.
Phanz, E. L., c '11. Draftsman, American Bridge Co., Gary, Ind.

Phannstiehl, J. J., g'08. Assistant Cashier, First National Bank, Baraboo, Wis.

Phelps, M. A., m'12. Construction Foreman, Canada Cement Co., Exshaw, Alberta, Can. Home: Albany, Wis.

\*Phillipps, Jonathan, c'87. Deceased

Phillips, N. F., c '77. Cashier and Bookkeeper, P. V. Collins Publishing Co., 525 S. 7th St., Minneapolis, Minn.

Phillips, V. L., g '09. Contractor, 7th and Deleware Sts., Kansas City, Mo.
Phipps, R. C., m'11. 422 Webster Place, Mil-

waukee Wis.

Pickard, A. E., m'12. With Sangamo Electric Co., Springfield, Ill.

Pierce, J. A., c'10 Salesman, Fisk Rubber Co., of New York. Tenth and Hope Sts., Los Angeles. Cal.

Pinney, J. C., C '10. Superintendent of Bridges and Public Bldgs., City Hall, Milwaukee, Wis.

Pitz, A. H., c'08. General Contractor, Manito-woc, Wis.

Plamondon, G. O., c '10. Designer, B. and B. Dept., Illinois Central R. R. Lake Front Station, Chicago, Ill.

Platten, W. J., c'08. 218 Oakland Ave., Green Bay, Wis.

Plumb, H. T., e '01. Engineer, General Electric Co., 718 Newhouse Bldg., Salt Lake City, Utah.

Polley, G. A., c'02. Manager, Phoenix Iron Works, Winona, Minn. ope, A. C., ch'12. Assistant Superintendent

Mineral Point Zinc Co., Depue, Ill.

Pope, G. W., c'98 Contracting Manager, Min-neapolis Steel & Machinery Co., Minneapolis, Minn.

Pope, L. F., c '11. Civil Engineer with R. S. Owen, Madison, Wis.

Post, G. G., e '04. Electrical Engineer, The Milwaukee Electric Railway and Light Co... waukee Electric Railway and Light Public Service Bldg., Milwaukee, Wis. Co.,

Potter, J. C., e'04. E. E., '09. Graduate Student, M. I. T. 4 Newsome Park, Jamaica Plain, Boston, Mass.

Potter, W. G., c'90. Engineer, Dept. of Water and Sewer Improvement, Aberdeen, S. D.

Potts, F. A., c'05. Engineer, Railroad Commission of Wissensin 200 Stanhanson Bldg Mil.

sion of Wisconsin, 206 Stephenson Bldg, Mil-

waukee, Wis.

Powell, A. O., c '80. C. E. '90. Consulting Civil
Engineer, 404 Central Blgd., Seattle, Wash.

Powell, D. A., e '07. With Milwaukee Gas Light Co., 182 Wisconsin St., Milwaukee, Wis. Powell, E. H., m '91. Fruit Grower, R. F. D. No. 2, Selah, Wash.

Powrie, W. R., m '96. District Engineer, C. M. &

St. P. Ry., Room 29, C. M. & St. P. Depot, Minneapolis, Minn.
Prael, F. W., m '91. Superintendent, American

Canning Co., Portland, Ore.

Price, J. R., e '05. Assistant Professor of Electrical Engineering, University of Wisconsin, Madison, Wis.

Probert, S. H., c'13. Assistant Topographer, Oregon Highway Commission. Portland, Ore. Home 514 10th St., Edmonton Alb., Can. Prochazka, H. C., m'12. Assistant to Chief En-

gineer, Heating Station, University of Wisconsin, Madison, Wis. Pugh, John, e '03. With J. I. Case Threshing

Machine Co., Racine, Wis. Pugh, W. H.,

m '11. With W. H. Pugh Coal Co.,

Pugh, W. H., m '11. With W. H. Pugh Coal Co., Racine, Wis.
Pulver, H. E., g '10. Instructor in Mechanics, University of Wisconsin, Madison, Wis.
Purdy, C. T., c '85. C. E., '86. Member Purdy and Henderson, Consulting Engineers, Everett Bldg., Union Square, New York City.
Quast, A. W., m '12. Accounting Dep't Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa

Pa.

Quigley, A. J., e '03. Sales Engineer, Agutter-Griswold Co., 411 Occidental Avenue, Seattle, Wash. Residence: 1731 Naomi Place.
 Quirk, James, c '73. L. L. B. '76. Retired. San

Diego, Cal.

Radtke, A. A., e'00. Consulting Engineer, 53 W.

Jackson Blvd., Chicago, Ill.
Rahn. Bruno, m '07. In Engineering Department,
Milwaukee Gas Light Co., Milwaukee, Wis.
Ramien, C. H., m '96. In Enginering Department,
C. O. Bartlett and Snow Co., Cleveland, O.

Ramstad, A. G., e '05. Superintendent Electrical
Distribution Pacific Gas and Electric Co., 48
E. San Antonio St., San Jose, Cal.
Rankin, H. S., m '09. Mine Inspector, Shenango

Furnace Co., Chisholm, Minn.
Rausom, G. B., c '91. General Inspector of Machinery, U. S. N., Post Office Bldg., Philadelphia, Pa.

Rath, W. C., c'06. President Rath Construction Co., 211 Grand Avenue, Milwaukee, Wis.

Rather, M. F., c'13. With Railroad Commission

Rather, M. F., c'13. With Railroad Commission of Wisconsin, Madison, Wis.

Read, B. K., m'06. Instructor in Machine Design, University of Wisconsin, Madison, Wis.

Reed, C. S. m'05. Vice Presidents General Equipment Co., 30 Church St., New York N. Y.

Reed, J. O. c'08. With Willamette Iron and Steel Works, Portland Ore.

Reedal, P. E., e'96. Banker, Poynette, Wis.

Reid, B. S. min '13 Mining Engineer, Cahoon Mine, Barahoo, Wis.

Mine, Baraboo, Wis.
d. J. W., c'06. Bridge Engineer, C. and A. Ry. Co., 1004 Transportation Bldg., Chicago,

Ill. Reilly, H. W., e'97. With H. M. Byllesby and

Co., Insurance Exchange, Chicago, 111.
Reilly, T. W., c'12. Surveyor, Wisconsin Highway Commission, Madison, Wis.

Reineking, V. H., c '08. Consulting Eng'neer, S01 Lewis Bldg., Portland, Ore.

I.ewis Bldg. Portland, Ore.
Reinert, W. A., c'11. Instructor in Mathematics,
Oak Park High School, Oak Park, Ill.
Reinhard, G. A., e'08. Assistant Engineer, Mechanical Appliance Co., 133 Stewart St., Milwaukee, Wis.
Reinhard, L. F., e'07. Chief Engineer, Mechanical Appliance Co., 133 Stewart St., Milwaukee, Wis.
Rendtorff, E. J., e'95. Science Master, Lake Forest Academy Lake Forest Ill

Rendtorff, E. J., e '95. Science Master, Lake Forest Academy, Lake Forest, III.
Reynolds, B. S., g '09. With Chain Belt Co., Milwaukee, Wis.
Reynolds, I. L., e '06. Electrical Engineer, 2004
Harris Trust Bldg., Chicago, III.
Reynolds, T. M., c '12.
\*Reynolds, W. E., e '09. Deceased.
Rhine, C. A., e '00. Manager, Union Electric Mannfacturing Co., 499 Broadway, Milwaukee,

ufacturing Co., 499 Broadway, Milwaukee, Wis.

Rice, E. F., e '08. Sales Engineer, Ft. Wayne Dept., of General Electric Co., 415 North American Bldg., Philadelphia, Pa. Rice, L. E., e '05. With Scranton Electric Co.,

Scranton, Pa.

Richards, Jerre T., c '95. With Paul Austin and Sons Co., 14230 Euclid Ave., Cleveland, O. Richards, W. A., m '99. Director of Manual Training, Rockford, Ill.

Richards, W. J., e '93. Chief Engineer, National Problem and Floating Co. 501 Page 1881

tional Brake and Electric Co., 561 Bradford

Avenue, Milwaukee, Wis.

Richardson, E. A., e '10. Chemist, 9 Monroe St.,
Warren, O.

Richardson, L. T., e '10. Ch. E. '13. Engineer,

Northern Chemical Engineering Laboratories, Madison, Wis.

Richardson, W. H., m'05. Deceased.

Richter, A. W., m'89. M. E. '91. Dean of Engineering, University of Montana, Missoula, Mont.

Richter, E. R. g '07. Erector, Spanish-American Iron Co., Felton, Oriente, Cuba.

Richter, O. A., m '12. 881 Mound St., Milwaukee, Wis.

Rickeman, F. H., e'06. E. E.'09. Manager, Interstate Light and Power Co., Galena, Ill.
Ripley, F. H., m'09. Chemist, People's Gas

Light Bldg., Chicago, Ill.

Ripley, R. R., m '06. Engineer, Portland Gas
Light Co., 5th and Yamhill Sts. Portland, Ore.

Roberts C., m'11. Safety Engineer, Sears Roe-buck and Co., Chicago, Ill. Mining Engineer.

Robertson, A. F., min '11. Livingston, Mont.

Robertson, L. B., m '06. With H. Koppers, Contractor, Joliet, Ill. Residence: 111 Mound

Robinson, G. P., e'06. 315 E. Water St., Milwaukee, Wis.

Robertson, R. E., c'10. County Highway Engineer, Mason City, Ia. Home: Ft. Atkinson, Wis.

Robinson, R. F., e '05. Engineer, Pacific Telephone and Telegraph Co., Spokane, Wash. Residence: W. 1517 5th Avenue.
Robinson. W. A., c '10. Draftsman, Purdy & Henderson, 1515 Monroe Bidg., Chicago, Ill.

Henderson, 1515 Monroe Bldg., Chicago, Ill.
Rodenbaeck, G. A., e '05. Manager, Clinton Metallic Paint Co., Clinton, N. Y.
Rogers, H. H., ch. '12. Chemist, Hess and Hopkins Leather Co., Rockford, Ill.
Rogers, P. B., g '05. With Engineers' Exploration Co., 600 Title Insurance Bldg., Los Angeles, Cal.
Rogers, W. A., c '88. C. E. '97. President, Bates & Rogers Construction Co., Old Colony Bldg., Chicago. Ill.

Chicago, Ill.
Rohde, W. C. F., e'10. Induction Motor Engineering Dept., General Electric Co., Schenectady, N. Y. Roherty, J. N., c'10. Contractor. 306 Breeze Ter-

Roherty, J. N., c'10. Contractor. 306 Breeze Terrace, Madison, Wis.
Rollman, A. C., e'01. Vice-President, Milwaukee
Pickle Co., Wauwatosa, Wis.
Rood, C. M., m'05. Associate Educational Director, Seattle Y. M. C. A., Seattle, Wash.
Rosenkrans, F. M., e'13. Cadet Engineer, Denver Gas and Electric Co., Denver, Colo.
Rosenstengel, Rudolph, e'94. Head of Engineering Dent. Bryant and Stratton College, Buf-

ing Dept., Bryant and Stratton College, Buf-

falo, N. Y.

Rosenstengel, W. R., m'87. Teacher. 61 Laurel
St., Buffalo, N. Y.

Rosholt, J. N., e'08. Sales Engineer, Electric

Storage Battery Co., 613 Marquette Bldg.,

Chicago, Ill.
Rosier, F. B., e'06. Electri
Ninth Ave., Greeley, Colo. Electrical Contractor, 918

Ross, H. H., c'96, e'97. Engineer, Toledo Railway and Light Co., Toledo, O. Rossing, A. H., c'06. Argyle, Wis.

Rote. A. F., min '82. Lumber Merchant, Monroe,

Wis. Rote, R. L., g'10. Contractor, Monroe, Wis. Roth, W. A., m'10. Salesman. Meese and Gott-

fried Co., 558 First Ave., Seattle, Wash.

Rowe, W. A. e '04. Engineer, Midland Engineer-ing Co. Ltd., Edmonton, Ala., Can. Rowe, W. J., e '03. Principal Technical School, Y. M. C. A. Institute, 19 S. La Salle St., Chi-sago, Ill.

Rowe, W. L., g '07. Junior Engineer, U. S. R. S., Meadow Creek, Sta., Easton, Wash. Rowell, L. D., e '01. Assistant Professor of Electrical Engineering, Purdue University,

La Fayette, Ind.
Rowley, F. B., m '05, M. E. '06. Instructor in
Mechanical Drawing and Descriptive Geometry, University of Minnesota, Minn.

Ruedebush, R. A., m '10. Merchant, Mayville, Wis.

Wis.
Rueping, L. H., m'03. Superintendent, Fond du
Lac Table Manufacturing Co., 239-257 W.
Scott St., Fond du Lac, Wis.
Ruhloff, F. C., m'12. Engineer, Bucyrus Co.,
South Milwaukee, Wis.
Ruka, F. W., e'96. Assistant Cashier, State
Bank of Boscobel, Boscobel Wis.
Rumley, V. P., m'12. With M. Rumely Co., Battle Creek, Mich.
Rumsey S. S., c'97. Chief Engineer, Oliver

Rumsey, S. S., c '97. Chief Engineer, Oliver Iron Mining Co., 716 Wolvin Bldg., Duluth, Minn.

Russell, W. S., m '06. Manager, Law Auto Co., La Crosse, Wis Rus\*, Thos., c '12. Draftsman, C. B. and Q. R R. Co., Room 14, C. B. and Q. Depot, Lin-

coln, Neb.

Rustone, B. A. T., c'09. Designer with Marshall E. Fox, First National Bank Bldng., Chicagoc'09. Designer with Marshall III.

W. H., c '08. Railroad Contractor, Janes-le, Wis. Ryan, ville,

Ryder, G. G., g '07. With Twin City Electric Co., 108-110 N. Fourth St., Minneapolis, Minn

Sacket, W. H., c'06. Consulting Engineer, State Bank Bldg., Madison, Wis.

Sanborn, J. N., m'81. Superintendent, Refrigeration and Reduction Plant, Southwestern Mechanical Co., 1623 Grand Avenue, Ft. Worth, Texas.

Texas.

Sanborn, R. A., e'01. Chicago Manager, David Lupton's Sons Co., 921 People's Gas Bldg., Chicago, Ill.

Sandberg, H. T., m'13. Engineer, Pawling and Harnischfeger Co., Milwaukee, Wis.

Sands, E. E., c'00, C. E., '06. City Engineer, Houstor, Texas.

Sanford, H. B., e'07. Assistant Professor of

Electrictal Engineering, Nan Yan University. Shangsai, China.

Sargent, J. D., m '07. With Chain Belt Co., Milwaukee. Wis.

Saridakis, Frank, m '04. Chief Draftsman, Chica-

go Steel Products Co., Chicago, Ill. Saubert, H. M., m'06. Superintendent, Jefferson City Light, Heat and Power Co., Jefferson City, Mo.
Saunders, A. B., m'02. Timber and Coal Dealer,
Milton. Wis.

Saunders, H. J., c'03, C. E.'10. Consulting En-

gineer, Valier. Mont. Savage J. L., c'03. Wi With A. J. Wiley. Consult-

ing Engineer, Idaho Bldg. Boise, Idaho.
Sawyer, A. R., E. E. '96. Professor of Physics
and Electrical Engineering, Michigan Agvicultural College, East Lansing, Mich.
Sawyer, Percy, g '05. Contractor, 424 Main St.,
Waukesha, Wis.
Saxton, R. G., c '09. Instructor in Civil Engineering Michigan Agricultural College.

neering, Michigan Agricultural College, East Lansing, Mich.

Scareliff, G. A., c'11. With Brazilian Iron and Steel Co., Ouro, Preto, Brazil.
Schafer, Otto, c'98. Resident Engineer, C. M. & St. P. Ry., Denton, Mont.

Schapper, Kurt, m'02. Automobile Repair Mechanic, Buick Motor Co., 160 Wisconsin St., Milwaukee, Wis.

Schaffschneider. Sylvester, c '05. Room 21°. Pierce Hall, Harvard University, Cambridge,

Mass.

Scheiber, A. V., e'99. District Installer, Chicago Telephone Co., 322 Washington St., Chicago. Scherer, A. C., c'09. Inspector, R. W. Hunt & Co., 2200 Insurance Exchange Bldg., Chi-

cago, III. Scherer, H. L., m'12. 2626 Vine St., Milwaukee, Wis.

Scheuer, C. H., c'08, Chief Engineer, Oliver Iron

Mine Co., Eveleth, Minn.
Schieher, O. J., C '12. Draftsman, Hydraulic
Dept., Pacific Light and Power Co., 603 P.8 Bldng., Los Angeles, Cal.

Schildauer, Edward, e '97, E. E. '11. Electrical and Mechanical Engineer, Isthmian Canal Commission Culebra, Canal Zone Panama.

Schilling, W. W., c '12. Civil Engineer. 609 Walnut St., Green Bay, Wis.

Schleck, W. H., m '13. Appraiser, Lloyd Thomas Co., 4727 Broadway, Chicago, Ill.

Schleifer, A. C., e '08. Superintendent, Excelsior Shoe and Slipper Co., Cedarburg Wis

Schmidley, W. R., e '05. Inspector, Wis Railroad Commission, Madison, Wis.

Wisconsin Schmidt, C. J., e'97, Patent Attorney. 1228 Monadnock Block, Chicago, Ill. Schmidt, F. C., e'08. Engineering Dep't, Kansas

Schmidt, F. C., e'08. Engineering Dep't, Kanss City Electric Light Co., Kansas City, Mo. Schmidt, H. F., min'11. Assistant Enginee Assistant Engineer,

Mahoning Ore and Steel Co., Hibbing, Minn. Schmidt, W. F., e '05. Operator, Portland Ry.. Light and Power Co., Portland, O. Schmitt, F. E., c '00, C. E. '04. Associate Editor,

"Engineering News" 505 Pearl St., New York City.

Schneider, A. G., ch '13. Engineer, People's Gas Co., Chicago, Ill. Schneider, H. C., m'98, M. E. '11. Mechanical Engineer, Fairbanks Morse Co. Residence:

Engineer, Fairbanks Morse Co. Residence: 1141 Prairie Ave., Beloit, Wis.
Schneider, M. P., c'12. Architect, 409 Chamber of Commerce Bldg., Chicago, Ill.
Schneider, W. G., e'10. Inspector, Wiscons'n Railroad Commission, Madison, Wis.
Schroeder, A. T., c'86. Author, Cos. Cob, Conn., R. F. D. 28, Box 151.

Schroeder, E. H., e'09. Contracting Engineer, Western Electric Co. Hawthorne, Ill. Resi-

Western Electric Co. Hawthorne, Ill. Residence: 335 W. 70th St., Chicago, Ill.
Schroeder, F. C., c'07. C. E., '10. Assistant Professor of Mechanics. Columbia University, New York City. Residence 220 Wadsworth Ave.

Schroeder, G. E., c'12. Road Dep't, Wisconsin Highway Commission, care of F. M. Sar-

gent, Ashland, Wis. Home: Augusta, Wis.
Schuchardt, R. F. e '97. E. E. '11. Electrical Engineer, Commonwealth Edison Co. 120 W. Adams St., Chicago, Ill.
Schuler, F. J., m '08. Draftsman, Sprague Canning Machinery Co. 2007 Maint Sprague Canning Machinery Co.

ning Machinery Co. 607 Majestic Bldg., Milwaukee, Wis.

Schulte, W. B., ch'10. Ch. E.'11. Chemical Engineer, Northern Chemical Engineering Laboratories, Madison, Wis. Residence: 2120 W. Lawn Ave.

Schultz, A. F., m'10. Engineer, Westinghouse Machine Co., 1120 Ross Ave., Wilkinsburg, Pa.

A. G., c'75. Horticultural Commission-Schulz, A. G., c'75. Horticultural er, Porterville, Tulare Co., Cal.

er, Porterville, Tulare Co., Cal.

\*Schuman, T. P., e '95. Deceased.
Schwada, J. P., c '11. Instructor in Structural Engineering, University of Wisconsin.
Schwalbe, W. L. c '11. Assistant to Division Engineer, City of Milwaukee. 187 Burleigh St. Milwaukee. Wis.
Schwede, F. A., c '08. Public Works Dep't., Mare Island, Cal. Box 362. Vallejo, Cal.
Schwendener. H. G., e '04. Chief Engineer, Mc-Kinley Power Plant. Peoria. Ill
†Scott. A. C., Ph. D., '02. Consulting Engineer.

†Scott, A. C., Ph. D., '02. Consulting Engineer, Dallas, Tex. Scott, G. A., e '02. Instructor in Physics, Col-

umbia University, New York City. Scott, H. H., e'96. General Manager, Doherty Operating Co., 60 Wall St., New York City.

Scribner, C. A., e '08. Foreman of Electrical Installations, The Arnold Co. Chicago, Ill. Scudder, C. M., c '11, C. E. '12. With Knoxville Power Co., Alcoa, Tenn. Seaman, H. H., e '00. President and Treasurer, W. S. Seaman Co. 486 Virginia St., Milwau-Foreman of Electrical

kee, Wis.

Seaman, Irving, e '03. Secretary, W. S. Seaman

Co. 486 Virginia St., Milwaukee, Wis. Seaman Co. 486 Virginia St., Milwaukee, Wis. Searles C. L., e '09. Engineer, Western Electric Co., Hawthorne Station, Chicago, Ill. Seifert, Andrew, c '13. With U. S. Engineers, Rock Island, Ill.

Semrad, C. A., e '08. Manager, Cheyenne Light, Fuel and Power Co., Cheyenne, Wyo.

Servis, F. A., e '04. Sales Dept., Westinghouse Electric and Manufacturing Co., Chi-

cago, Ill. Residence: 5007 Madison Ave.
Severson, H. A., c'01. General Manager, Barber Coleman Co., Rockford, Ill.
Severson, S. B. e'07. Genreal Manager, Manhattan and Queens Traction Co., Queensborough Plaza Court, Long Island C ty, N. Y.
Seymour, M. E., e'98. Sales Agent, 5409 Magnolia Ave., Chicago, Ill.
Sevton H. J. c'05

Ave., Chicago, III.

Seyton, H. J., c'05.

Shadbolt, L. J., g'06. Fruit Grower R. F. D.

6, North Yakima, Wash.

Shape, A. C., ch'12. With Mineral Point Zinc

Co. Depue, Ill.

Shapiro, J., ch '08. Assistant Engineer, R. R. Commission of Wisconsin, 206 Stephenson

Bldg., Milwaukee, Wis. Shapiro, S. R., e '11. 214 W. Sixth St., Marshfield, Wis.

Shea, J. R., e'09. With Western Electric Co., Hawthorne, Ill. 220 N. Oak Park Ave., Oak

Park, Ill.
Shealy, E. M., e '04. Assistant Professor of Steam Engineering, Extension Division, Uni-

versity of Wisconsin, Madison, Wis. Sheldon, S. R., e '94. Professor of Electrical Engineering, Government Institute of Techno-

gineering, Government Institute of Technology, Shanghai, China.

\*Shelton, A. W., c'83. Deceased.
Shepherd, C. H., e'08. Chief Layout Engineer, Fep't. of Electricity, City Hall, Chicago, Ill.
Sheriff, F. B., m'12. Manager, Montana Motor Co., Helena, Mont.
Sherburne, F. V., c'10. Structural Draftsman, American Bridge Co. Cary Ind.

American Bridge Co., Gary, Ind. Sherman, J. R., c'08. Assistant Engineer, U. S. R. S. Ellensburg, Wash.

Sherman, Lewis, Jr., g '07. Treasurer, Jewett and Sherman Co., 287-291 Broadway, Mil-Treasurer, Jewett waukee, Wis. Residence: 457 E. North Ave. Sherron, F. J., g'05. With Pressed Steel Car Co. McKee's Rocks, Pa.
Shipek, A., e'09. Assistant Electrical Engineer, Puget Sound Traction Light and Power Co.,

Seattle, Wash. Shonat, A., c'12. With A.

D. Burnett and Co., Contractors, Spooner, Wis.

Contractors, Spooner, Wis.

Shorey, E. R., c '08. Sup't Wilkinson Mine, Benton, Wis.

\*Short, F. J., m '97. Deceased.

Shortt, J. M., c '89. Chief Estimator for Noelke-Richards Iron Works, 1420 Union St., In-

dianapolis, Ind. Shu, S. J., e '13. Mass. Student, M. I. T., Boston,

J. W., e'99. Assistant Professor Shuster. Electrical Enginering University of Wisconsin, Madison, Wis.

Siefert, P. H., e'10. Electrical Engineer, Allis-Chalmers Mfg. Co., Milwaukee, Wis.

Silber, F. D., e '94. Attorney, Wheeler, Silber and Isaacs 137 S. La Salle St., Chicago, Ill. Simon, A. H., c '13. Surveyman U. S. R. S., Glasgow, Montana Home. 1818 E. 6th St., Ashland, Wis.

Simon, E. M., e '07. Instructor, American School of Correspondence, 58th and Prexel Aves.,

Chicago, Ill. Simons R. W., E'12. Traffic Dep't, Pacific Tel.

Co., 445 Bush St., San Francisco, Cal. Simmons, G. M., e '05. Electrical Engineer, Westinghouse Electrical and Manufacturing Co. 528 W. 25th St., New York City. 961 St.

Nicholas Ave. Simpson, J. F., g '08. With Vance and Co. 1-4

Royal Insurance Bldg., Chicago, Ill.
Sinz, E. F., c'05. Engineer, Central Aquirre
Co., Central Aquirre, Porto Rico.
Sjoblom, A. T., e'10. Foreman of Electric Installation, Miraflores Locks, Corzal, Box 143, C. Z., Panama.

Sjoblom, M. C., c'13. With Illinois State Water

Survey, Urbana, Ill. Sladky, A. C., m '11. Superintendent, National

Sladky, A. C., m'11. Superintendent, National Enamel and Stamp Works, Milwaukee, Wis.
Slidell, Kemper, c'10. Sales Engineer, Milwaukee Chain Belt Co. Milwaukee, Wis.
Sloan, W. F., e'04. Consulting Engineer, Washington Bldg., Madison, Wis.
Smeaton, C. A., e'07. With Laclede Gas Light Co. 148 Rutger St., St. Louis Mo.
Smith, A. A., c'08. Assistant Examiner, U. S. Patent Office, Washington D. C. Residence: 1324 Euclid St., N. W.
Smith, Allard e'98. Engineer Central Union and Cleveland Telephone Cos., 33 N. 3d St., Col-

Cleveland Telephone Cos., 33 N. 3d St., Columbus, O. Smith, A. I., e '93. Contractor, 21 Wisconsin St.,

Wauwatosa, Wis. Smith, C. L., c'12. Ass't Engineer, T. M. E. R.

and L. Co., Milwaukee, Wis.

Smith, F. H., c '91. Secretary-Treasurer, H.
Ellenberger Co. 1234 People's Gas Bldg., Chi-

cago, Ill.

Smith, G. E., e'09, E. E. '11. Patent Attorney, 1532 Marquette Bldg., Chicago, III. Smith, H. A., e'98. Secretary and Manager, Monroe Electric Co., Monroe, Wis.

Smith, H. A., c '91. Smith, H. B., min '85. Vice-President, First Na-

tional Bank, Colton, Cal.
Smith, J. E., c'02. Associate in Civil Engineering, University of Illinois, Urbana, Ill.
Smith, J. M., c'07. Engineer, Washington Water Power Co., Spokane, Wash. 1603 Gardner

Smith, J. R., m '05. Mechanical Draftsman, J. G. White & Co., 43 Exchange Place, New York City. Smith. c'12. Assistant City Engineer,

Madison, Wis.

Smith, L. D., c'09. In Stone and Vessel Business Sturgeon Bay, Wis.

Smith, L. L., e'06, C. E. '07. Construction Engineer, C. A. Chapman Co., 28 E. Jackson Blvd., Chicago, III.

Smith, L. S., c '90, C. E. '95. Associate Professor of Topographic and Geodetic Engineering University of Wisconsin, Madison, Wis. Smith, O. C., c'07. Junior Engineer, U. S. R. S., Mitchell, Neb. Smith, P. S., e'98. Assistant Chief Engineer,

Kellogg Switchboard and Supply Co., Chicago, Ill.

Smith, R. M., c'13. Instrumentman and Draftsman, City Hall, Kenosha, Wis. Home: 1717 Regent St., Madison, Wis.
Smith, R. T., Jr., m'02. Banker. 5 and 7 Calvert St., Baltimore, Md.

Smith, S. T., c '00. Land Agent. California Club. Los Angeles, Cal.
Smith, W. H., g'06. Salesman. 279 Washington

St., New York City.

Sorem, A. J., e '06. Assistant Chief Electrical Engineer, Ft. Wayne Electric Works. Madison, Wis.

Soergel, R. J., c '12. Draftsman, Bucyrus Co.,

South Milwaukee, Wis. Iding, Will, e'03. General Manager, Spalding, mook Electric Light and Fuel Co. Tillamook, Ore.

Spence, Harry e '98. Principal, Fifth District

Spence, Harry, e 98. Frincipal, Filth District School, 1353 Kane St., La Crosse, Wis. Spencer, F. L., e '08. Erecting Engineer, Allis-Chalmers Co. Milwaukee, Wis. Spencer, R. C., Jr., m '86. Of Spencer and Pow-ers, Architects, 10 So. La Salle St., Chicago, 111

Sperry, D. R., m'07, M. E.'10. With D. R. Sperry and Co., Batavia, Ill.

Spindler M. H., c'98. Inspector L. S. & M. S. Ry. CCo., 1164 E. 105th St., Cleveland, O. Spoor, I. H., m'10. Instructor, Northwestern University, Evenster, Ill. Positions of 1000

University, Evanston, Ill. Residence: 1922 Maple Ave.

Spray, L. E., E'12. Signal Draftsman, A. T. and S. F. Ry. Co., Topeka, Kan. Springer, E J., '09. With Heine Chimney Co., 30 Church St., New York City.

Staack, J. G., c'04. Assistant Topographer. U. S. G. S., Washington, D. C. Staehle, P. M., e'12. Testing Dept. General Electric Co., Schenectady, N. Y.

Stanchfield, Bartley, m'94. Fond du Lac, Wis. Stanchfield, G. H., c'92. Engineer and Con-tractor. 195 4th St., Fond du Lac, Wis.

Stanchfield, G. H., c'92. Engineer and Contractor. 195 4th St., Fond du Lac, Wis.
Stanley, S. W., e'11. Lieutenant, Coast Artillery Corps, U. S. Army, Ft. Caswell, N. C.
Starkey, H. N., C'13. With Grank Trunk Pacific Ry., Endako, B. C., Can.
Starks Sanford P., m'02. Secretary, The Starks Lewis Land Co., Madison, Wis.
Stearns, E. W., c'07. Bridge Engineer, West Maryland Railway Co., Baltimore, Md.
Steenrod, T. F., e'08. 48 Lincoln Ave., Freeport, Ill.

nberg, E. J., e'09. Inspector Wisconsin Railroad Commission, 206 Stephenson Bldg., Steinberg,

Milwaukee, Wis.
Steinberg, W. H., ch'13. With Cutler-Hammer
Co., Milwaukee, Wis.
Steinfort, C. E., e'08. Secretary, Inter-County
Light and Power Co., Elmwood, Wis.
Steinhagen, E. D., c'11. Civil Engineer. 20 Mack

Blk., Milwaukee, Wis. Residence: 2725 State

Stengl, R. J., min '13. With Century Zinc Co., Purcell, Mo. Home: R. F. D. No. 2, Antigo, Wis.

Stephany, E. J., m '13. Commercial Engineer, Western United Gas and Electric Co., Aurora, Ill. Home: 1011 Franklin St., Manitowoc, Wis.

Wis.
Steudel, G. E., m'11. Steam Engineer, South
Works, Illinois Steel Co., So. Chicago, Ill.
Stevens, C. H., c'02. Deceased.
Stevens, H. L., c'03. President, H. L. Stevens
& Co., 910 S. Michigan Ave., Chicago, Ill.
Stevens, John, Jr., m'89. In Loan and Insurance Business. 401 College Ave., Appleton,
Wis

Wis.

Stewart, A. T., e'04. 546 Bradburg Bldg., Los

Angeles, Cal.
Stewart, J. A., e '04. Electrolysis Engineer, Wisconsin Telephone Co., 183 5th St., Milwaukee. Wis.

wart, R. W., c'99. Chief E Bridge Dept., Los Angeles, Cal. Stewart, Engineer, City

St. George, A. B., e'09. 721 Grand Ave., Milwau-

kee, Wis.

Stieler, F. C., '02. Salesman, Westinghouse Electric and Manufacturing Co. 165 Broadway,
New York City.

Stiles, R. L., e'13. Signal Dep't, Rock Island Lines, Chicago, Ill. \*Stillman, C. F., m'04. Deceased.

Stillwell, E. D., e '10. Electrical Engineer, Isthmian Canal Commission. Gatun, C. Z., Pan-

Stivers, C. P., Jr. c'13. Civil Engineer. Toledo & Western Railroad Co. Bucyrus, O. Home: 533 Watson St., Ripon, Wis. Stock, Harry, c'06. Chief Designer W. H. Rose-

crans Engineering Co., 525 Stock Exchange

Bldg., Chicago, Ill.
Stocker, E. C., c'09. Secretary, Whangpoo Conservancy Board, Shanghai, China.
Stocker, G. P., c'09. Assistant Professor of Civil Engineering. State Agricultural College New Movice lege, New Mexico.

Stockman, L. R., c'02. Irrigation and Water Power Engineer, Shoemaker Bldg., Baker, Ore.

Stoddard, L. L., e'13. Student Engineer, General Electric Co. Engineer with Missouri Electric Co., Webster Groves, Mo.
Stoelting, H. H., e'13. Electrical Engineer, Mil-

waukee Intake Tunnel, Laze Park, Milwau-

kee Wis. Home: Oconto, Wis.
struction Co., Vale, Ore.
Sturtevant, H. B. c '80, C. E. '88. Deceased.
Suhm.. E. R., ch'09. Chemical Engineer. 772
City of Milwaukee, City Hall, Milwaukee, Wis.

Stone, M. B., c '00. Engineer, A. Y. Bayne & -uo<sub>D</sub> Nows 'M 'L UIIA '7I. O "L 'H 'Goodstags ing, Ind.

consin, Madison, Wis.

consin, Madison, Wis.
Co., 640 Andrus Bldg., Minneapolis, Minn.
Storer, R. F. c '09. With Standard Oil Co. WhitStorey, O. W., ch '10, Ch. E. '13. Instructor in
Chemical Engineering, University of WisStoelting, R. E., c '09. With Engineering Dept.,
mers Co., Milwaukee, Wis.
Strothman, O. E., m '12. Draftsman, Allis-ChalRailroad Commission, Madison, Wis.
Strait, E. N., e '06, E. E. '12. Expert, Wisconsin
Kinnickinnic Ave., Milwaukee, Wis.
Suhs, G. H., m'10. Residence: 315 Waupaca St.,
Waupaca, Wis.

Suhs, G. H., m'10. Residence: 515 Waupaca, Wis.

Sumnicht, H. A., e'10. With General Electric
Lamp Co., Harrison, N. J.

Sunderland, I. C., c'02. Junior Engineer, U. S.
Lakes Survey, 205 Old Federal Bldg., De-

Lakes Survey, 205 Old Federal Bldg., Detroit, Mich.
Sustins, W. O., e '06. With Argo Electric Vehicle Co., Saginaw, Mich.
Swan, G. D., e '05. 3 Sanchome Mitoshirocho, Kanda, Tokyo, Japan. After Sept. 1, 1914: Kobe Y. M. C. A., Kobe, apan.
Swaty, D. Y., c '98. Engineer. Great Lakes Dredge and Dock Co., 1148 Oliver Bldg., Boston Mass.

ton, Mass. Sweet, Franklin, m'93. 285 Farewell Ave., Mil-

waukee, Wis. Sweet, N. C., m'11. Salesman, 1814 Olive Ave.,

Santa Barbara, Cal. Swenholt, Helmer, '09. U. S. Engineers Office,

Keokuk, Ia. §Swenson, Magnus, min '80. M. E. 'hon. '98. President, Southern Wisconsin Power Co., Car-

roll Blk.. Madison. Wis.
†Swenson, B. V., E. E. '01. Street Railway Advertising Co., 175 Fifth Ave., New York City.
Swinburne, E. D., m'88. Manager, N. Y. Power
Plant, National Biscuit Co., 409 W. 15th St.,

Plant, National Biscuit Co., 409 W. 15th St., New York City.

Tack, M. A., c'13. Asst. Engineer, Wisconsin Steel Co., Chicago, Ill.

Talbot, L. R., c'11. Civil Engineer. 78 Bayard St., New Brunswick, N. J.

Tarr, J. C., ch'07. In wholesale oil and coal business. 1025 Central Bldg., Los Angeles, Col. Cal.

Taylor, H. C., c'11, C. E. 12. Designer. Room 701, 10 So. La Salle St., Chicago, Ill.

Taylor, J. C., e'01. District Manager, Denver Rock Drill and Machinery Co. 115 W. 2nd South St., Salt Lake City, Utah.

Terhorst, Stephen, e'06. Farmer. Donnybrook, N. D.

Terrell, E. E., c'04. Deputy County Engineer, Hennepin Co. Court House, Minneapolis, Minneapolis,

Minn.
Terry, C. E., e'll. National Lamp Works of General Electric Co., Nela Park, Cleveland,

Teschan, W. F., m'07. General Superintendent, Milwaukee Concrete Mixer and Machinery Co., Milwaukee, Wis., 1916 St. Paul Ave., Milwaukee, Wis.

waukee, Wis.
Tessier, L. L., m'93. General Superintendent,
Electric Light and Power Co., DePere, Wis.
Textor, C. K., ch'13. With U. S. Forest Products Laboratory, Madison, Wis.
Thayer, B. S., c'07. Assistant Engineer, U. S.
R. S., 718 Mills Bldg., El Paso, Tex.
Theurer, F. L., ch'11. With Patton Paint Co.,
Milwaukee, Wis. Residence: 911 40th St.
Thickens, J. H., ch'08, Ch. E. 12. Director of
Laboratories, Beaver Board Co.. Buffalo, N.
Y.

Y.

Thiele, O. V., m'08. Assistant Examiner, Patent Office, Washington, D. C.
Thiessen F. C., c'10. Instructor in Structural Engineering, Extension Division, University of Wisconsin, Madison, Wis.
Thomas, E. A., e'07. Signal Foreman, C. and P. Division, Penn. Lines West. 8009 Lammer

Ave., Cleveland, O.
Thompson, I. T., m '07. Testing Engineer, Amer-

Well Works, Aurora, Ill.
Thompson, J. R., min 87. General Manager,
American-Boston Mining Co., Diorite, Mar-

American-Boston Mining Co., Diorite, Marquette Co., Mich.

Thompson, L. M., e'07. Manager, Apple Orchards. Post Falls, Idaho.

Thon, G. L., c'05, C. E. '12. Merchant. 16 N. Broadway, Aurora, Ill.

Thorkelson, H. J. B., m'98, M. E.'01. Professor of Steam Enginering, University of Wisconsin Medican Wis

sin. Madison, Wis.

Thorne J. G., c'06. City Engineer, Clinton, Ia.
Residence: 728 Douglas Court.

Residence: (28 Douglas Court.
Thorpe, G. G., m '91. Second Vice President, Illinoise Steel Co., 1528 Commercial National Bank Bldg., Chicago. Ill.
Thuringer, Charles, c '93. Merchant. 430 State

St., Madison, Wis.
Thwing, C. C., e '06. District Manager, Federal Sign System. 822 Mary Place, Minneapolis, Minn.

Thygeson, N. M., min '85. Lawyer. 306 Minne-apolis Street Railway Bldg., Minneapolis, Minn.

Tibbits, F. A., e'08. Sales Engineer, Western Electric Co. 115 Purchase St., Boston, Mass. Tibbits, H. L., c'94. Lumber and Coal Dealer. Sycamore, Ill.

Sycamore, III.

Tierney, J. T., m'08. Engineer Laclede Gas
Light Co. Residence: 1747 Simpson Place,
St. Louis, Mo.

†Titus, W. T., C. E. '13. Draftsman Eng. Dept., C.
M. and St. P. Ry., Chicago, III.

Torkelson, F. A., c'11. Engineer, C. M. and St.
P. Ry. Union Depart Milwankee Wis

P. Ry., Union Depot, Milwaukee, Wis. kelson, M. W., c '04. State Bridge Engineer.

Torkelson, State Highway Commission Madison, Wis.

Torkelson, W. L., m '02. Superintendent, Belle
City Mfg. Co., Racine, Wis.

Tourtellot, E. B., c '10. County Engineer, Clay-

ton Co., Elkader. Ia.

Townsend. H. I., e '01. Telephone Power Plant
Installer. Western Electric Co. 447 W. Ave., 52, Los Angeles, Cal.

Townsend, J. R., e '04. Sales Engineer Westing-house Electric and Manufacturing Co., 700 E. 61st St. N., Portland, Ore.

Trane, R. N., m'10. Sales Engineer, Trane Co., 839 N. Dearborn St., Chicago, Ill. Trautman, G. H., m'96. Craftsman. 4879 Ravenswood Park, Chicago, Ill. Trayer, G. W., c'12. U. S. Engineers Office La Crosse, Wis.

Traxler, Henry, c'13. Surveyor. Room 406, Cus-

tom House Bldg., Milwaukee, Wis. Home: 5331/2 18th St.

533½ 18th St.

Treber, A. P., e '04. Manager, Consolidated Power and Light Co., Lead City, S. D.

Trester A. M., c '06. Draftsman, with D. W. Mead, 530 State St., Madison, Wis.

Trewartha, J. G., '10. Superintendent, Martin

Trewartha, J. G., '10 Mine, Benton, Wis. Trippe, H. M., c'96. Railway Contractor, White-

water Wis. †Trooien, Ole., M. E., '07. Construction Engineer.

†Troolen, Ole., M. E., '01. Construction Engineer. 2647 Harriett Ave., Minneapolis, Minn.
Trowbridge, J. B., c '76. Deceased.
True, E. B., e '96. Farmer. R. F. D. No. 4,
Galesburg, Ill.
True, H. A., Jr., c '09. Inspecting Engineer, Office of Commissioner of Public Lands, Cheyenne, Wyo.

Tubesing, W. F., c '05. President and Treasurer, Phoenix Ferro Concrete Co., 419 Mathews

Phoenix Ferro Concrete Co., 419 Mathews Bldg., Milwaukee, Wis.

Turner, J. M., c '77. Manager, T. and S. Ranch, Chenango, Tex. Residence: Angleton, Tex.

Turner, P. B. e '05. Engineer, Wisconsin Railroad Commission, Madison, Wis.

†Turnock, L. C., Ch. E. '11. Head of Dep't of Electroschemical Engineer, State College

Electo-chemical Enginering, State College,

Lehling, O. C., c'90. Architect and Engineer.
832 Wells Bldg., Milwaukee, Wis.
Uihlein, O. L., '07. Engineer, Koschin Uihlein
Electric Co., Milwaukee, Ws. Residence: 806

Electric Co., Milwaukee, 118.

Downer Ave.

Uihlein, W. B., m'04. With Jos. Schlitz Brewing
Co., Milwaukee, Wis.

Ullius. F. W., Jr., c'11. Engineer, Village of
East Milwaukee. R. R. 8, Station E, Box
181, Milwaukee, Wis.

Updegraff, Milton. c'84. Professor of Mathematics. Naval Observatory, Washington, D. C. Urbutt, C. F., c'09. Engineering Dept., C. M. & St. P. Ry. 1351 Railway Exchange, Chicago,

TIL Van Auken, C. L., c'10. With Condron Co., Struc-

tural Engineers, 1215 Monadnock Bldg., Chi-

Van Auken, K. L., c '09. C. E. '13. Assistant Editor | 'Railway Engineering,' '431 S. Dearborn St., Chicago, Ill.

Van Derzee, G. W., e '08. With T. M. E. R. and L. Co., Public Service Bldg., Milwaukee, Wis. Van Hagan, A. E., e '06, E. E. '10. Acting Traffic Engineer, Chicago Telephone Co., Chicago, Ill. I11

Van Hagan, L. F., c'04. Assistant Professor of Railway Engineering. University of Wisconsin. Madison, Wis.

Sill. Madison, wis.

Van Hise. C. R., min '79.

Wisconsin. Madison, Wis.

Van Hook, W. A., c '06.

road and Warehouse Commission, 714 Insur-

ance Exchange, Chicago, Ill.

ance Exchange, Chicago, III.

Van Horn, I. H., e '08. Research Engineer National Lamp Works, General Electric Co., 1811 E. 45th St., Cleveland, O.

Van Loon, W. O., c '10. Midway, Wis.

Van Meter, T. E., '07. Assistant Superintendent, Deere and Co. Moline, III. Res.: 463 14th St., East Moline, Ill.

Van Ness, L. G., e'96. Vice President and General Manager, Merchants Power Co., 48 N. 2nd St., Memphis. Tenn.

Van Ornum, J. L., c'88, C. E. '91. Professor of Civil Engineering. Washington University, St. Louis, Mo.

†Van Zandt, J. G. C., C. E. c '07. Construction Engineer. 519 Central Bldg., Los Angeles, Cal. Vaughn, C. D., c '13. Draftsman, McClintic Mar-

shall Construction Co., Pittsburgh, Pa.
Home. 1735 Ogden St., Denver, Colo.
Vaughn, F. A., e '95. With Vaughn, Meyer and
Sweet, Consulting Engineers, Majestic Bldg.,

Milwaukee, Wis.

Vea, F. J., m'01. President, Stoughton Wagon Co., Stoughton, Wis.

Veerhusen, H. H., C'12. Commercial Engineering Dept., A. T. and T. Co., 15 Dey St., New York City. Home: 140 W. Gillman St., Madison, Wis.

Vinson, A. W., m '05. With The Cutler Hammer Mfg. Co., 50 Church St., New York City.

Vivian, G. F., c '13. Engineer, Bates and Rogers Construction Co., Chicago, Ill. Home: 336

Construction Co., Chicago, III. Home: 500 S. Homan Ave., Chicago, III. Police: 500 Volk, F. E., e'08. Librarian, College of Engineer-ing, University of Wisconsin, Madison, Wis. Volquarts, V. H., m'13. Superintendent, Amer-ican Zinc Co., Kansas City, Kan. Home: Ply-

way Commission, Madison, Wis.

Was Commission, Madison, Wis.

Was Commission, Madison, Wis.

Wachtmann, E. L. C., m'06. Farmer, R. F. D.

Carbondale Machine Co., 50 Church St., New York City.

Wachenfeld, S. C., m '07. Refrigeration Engineer. 2, Rutledge, Mo.

Wade, C. G., m '84. Structural Engineer, 403
Grand Ave., Milwaukee, Wis.
Wadsworth, W. J., m '07. Chief Operator, Wisconsin Public Service Co., Crivitz, Wis.

Wagley, O. O., e '05. Superintendent, Wells Power Co., 1007 Wells Bldg., Milwaukee, Wis. Wagner, G. E., e '07. Inspector, Ft. Wayne Electric Works Madison, Wis. Res.: 1908 Rail-

road St.

Wagner, K. E., c'10. Engineer, Swift and Co. Care C. O. Young, Union Stock Yards, Chicago, Ill.

Wagner, R. T., e'05. In Transformer Department, General Electric Co., Schenectady. N. Y. Wahl, L. E., e '08. Commercial Engineer, Wisconsin Telephone Co., 183 Fifth St., Milwaukee, Wis.

Waite, J. H., e'10. Junior Engineer, United States Lake Survey. Old Custom House, De-

troit, Mich.

Waite, W. E., e '08. Farmer. Brooklyn, Wis.

Wallber, H. C., c '08. Sales Engineer, Vilter Mfg.
Co., Milwaukee, Wis.

Waldo, G. E.,m' '85. Patent Lawyer. 634 Monad-

nock Block, Chicago, Ill.

Waldo, M. A., m'84, General Manager, The Dominion Phosphate Co., Bartow, Fla.
Wales, C. M., m'85, Agent, Otis Steel Co., Titus-ville Forge Co., 11 Broadway, New York City. Res.: 410 Riverside Drive.

Walsh, A. J., e '06. Engineer, Wisconsin Gas and Electric Co., Kenosha, Wis. Waltenberg, R. G., ch'12. With Bureau of

Standards, Washington, D. C.
Walter, J. D., e'13. Student Engineer, General
Electric Co., Schenectady, N. Y. Home: Onigum, Minn.

Walter. R. G., c'05, C. E. '10. Resident Engineer, Wisconsin River Power Co., Prairie du Sac,

Ward, L E., c '07. Superintendent, Electrolytic Bleach Plant, Oxford Paper Co., Rumford, Me.

Ward, O. G., m '13. Salesman, Johnson Service Co., 313 E. 10th St., Kansas City, Mo.

Warner, F. D., m '96. General Manager, Okanogan Orchard Co., Tonasket, Wash., or 101 Tremont St., Boston, Mass.

Warner, F. M., m'07. Manager, Standard Print Co., 314 Hyde Block, Spokane, Wash.

Warner, H. M. c '04. Structural Engineer, Mead-Morrison Mfg. Co., 746 Monadnock Block, Chicago, Ill.

Warner, H. R., m '98. Farmer. Whitewater, Wis. Warner, M. F., e '95. In Fire Insurance. Harris Trust Bldg., 111 Monroe St., Chicago, III.

Warren, W. E., e'06. Traffic Engineer, Chicago Telephone Co., 2721 N. Humboldt St., Chicago,

Warth, E. C., e '12. Correspondent, Allis-Chalmers

Co., Milwaukee, Wis.
Washburn, F. E., c'01, C. E.'09. With Missouri
Valley Bridge and Iron Co., Leavenworth, Kan.

Wasmansdorff, O., c'00. Member of Wasmansdorff & Eastman, Engineers and Architects.

Rooms 3-6, Diamond Block, Lewiston, Mont. Wasson, J. H., c'12. With Division of Valuation, Interstate Commerce Commission, 914 Karpen

Harrent Commerce Commission, 914 Karpen Bldg., Chicago, 11l. Wasweyler, W. H., m'85. President, Milwaukee Brass Mfg. Co., Milwaukee, Wis. Waterman, I. F., c'12. Instructor in Civil En-gineering, J. B. Stetson University, De Land, Fla.

Watkins, R. M., m'12. Engineer, Mathew Johnson Land Co. of Kansas City, Lakeport, Fla.
Watson, Clarence F., c'10. With Tri-City Ry.
Co., Davenport, Ia.

Watson, C. T., c '04. Contracting Engineer, Crow Wing Co., Crosby, Minn.

Watson, J. W., e '02. Assistant Professor of Electrical Engineering, University of Wiscontinuous Control of Contr

Electrical Engineering, University of Wisconsin, Madison, Wis.

Watson, R. D., m'11. Engineer, Webster Manufacturing Co., Tiffin, O.

\*Webb, H. S., E. E. '98. Deceased.

Weber, C. G. e '08. With Cottonwood Coal Co.,

Stockett, Mont.

Weber, F. C., e '03. Engineer, Pneumatic Conveyor Co., Chicago, Ill. Res.: 4751 Kenmore Ave.

Weber, W. G., g '09. With U. S. R. S., 718 Mills Bldng., El Paso, Texas.

Wedemeyer, A. A. m '03. 643 National Ave., Milwaukee. Wis.

Wedlock, F. V., e '10. Superintendent, Feather-edge Rubber Co., 408 W. Indiana St., Chica-go, Ill. Res.: 3216 Greenwood Terrace.

Weed, L. B., c '00. Superintendent of Mines, Colorado Fuel & Iron Co., Sunrise, Wyo.

Week, E. F., m '12. Heating and Ventilating Engineer. 510 Peyton Bldg., Spokane, Wash. Home: 1914 First Ave., Spokane, Wash.

Wegner, A. A., m '11. With Chain Belt Co., Milwaukee, Wis.

Wehausen, G. W., e '08 Operating Engineer, Great Northern Power Co., Fond du Lac, Minn. Wehner, S., c '12. Civil Engineer with D. W.

Mead, 530 State St., Madison, Wis.

Weidenfeller, R. P., c'10. Engineer, Oliver Iron
Mining Co., Coleraine, Minn.

Weld, H. K., g'05. Special Agent, Berkshire Life Insurance Co., Suite 401 Title and Trust Bldg., Chicago, Ill.

Welser, G. B., Jr., Engineer, Chain Belt Co., Milwaukee, Wis. Home: 430 Kane Pl., Milwaukee, Wis.

Welsh, H. L., min '10. Assayer, Southern Cross

Mine. Cable, Mont.
Welsh, J. T., e'10. With W. F. Cummings, Contractor. 102 N. 5th Ave., Chicago, Ill.

Wendt, C. A., e'13. Home: Waterloo, Wis. Wessel, F. C., g '07, M. E. '10. With Electric Co., Florence, Colo.

West, Arthur, m '87. Manager Power Dept., Bethlehem, Steel Co., South Bethlehem, Pa.

Wetlaufer, E. H., m '07. With W. A. Baehr, Consulting Engineer, 2009 Peoples Gas Bldg., Chicago, Ill.

Wetzel, W. J., c'10. Civil Engineer, 815 W. John-

son St., Madison, Wis.

Wetzler, W. H., c'06, C. E.'10. Assistant Hydraulic Engineer, H. M. Byllesby and Co., 175

Jackson Blvd., Chicago, Ill.

Wharry, M. E., m'05. Engineer, Berlin Machine

Works, Beloit, Wis.

Wheeler, H. B., e '09. With National X-Ray Reflector Co. 235 W. Jackson Blvd., Chicago, Ill. Wheeler, R. A., e '06. Engineer, Wisconsin Telephone Co., 183 Fifth St., Milwaukee, Wis. Wheeler, W. S., m '05. Draftsman, Pennsylvania Engineering Works, Newcastle, Pa.

Whelan, James, c'77. Junior Engineer, River and Harbor Improvements, U. S. Engineer's Office, Milwaukee, Wis. Whelan, J. B., e'll. Engineer, Illinois Traction Co., Peoria, Ill.

Whelan, T. C., e '07. Division Traffic Supervisor, Wisconsin Telephone Co., 183 5th St., Milwaukee, Wis.

Whinery, R. H., c '05. Engineer, Board of Public Works, Manila, P. I.

Whitby, W. R., c'04. Road Master, Prairie Division, Grand Trunk Pacific Ry., Biggar, Sask., Can.
White, A. R., ch'11. Engineer, Menominee and Marinette Light and Traction Co., Menominee,

Mich.

White, Frank, m'86. Deceased.
White, G. L., e '11. With Mitchell-Lewis Motor
Co., Racine, Wis.
Whiting, M. A., e '04. Engineer, General Electric
Co., Schenectady, N. Y.

Whitmore, J. Man., Can. J. B., m'07. Farmer. Marquette,

Whitney, A. B., c'08. Engineer, C. M. & St. P. Ry., Room 1211 Railway Exchange, Chicago, Ill.

Whitney, E. N., c'13. Assistant Inspector, Railroad Commission of Wisconsin, Madison, Wis.

Res.: 18 E. Gorham St., Madison, Wis. Whittaker, E. H., m '09. Supervisor of Manual Training, Blake Memorial School, Cor. Victoria and Chapala Sts., Santa Barbaro, Cal. Whittemore, H. L., m '03, M. E. '10. Instructor in Mechanics, Columbia University, New York

City.

Whomes, H. R., m'00. Engineer, Packard Motor

Values, H. R., in 60. Engineer, Fackard Motor Car Co., Detroit, Mich. Wickstrom, G. A., m '09. East End Station, Su-perior, Wis. Wied, J. C., m '07. In Charge of Irrigation Proj-

ect, Pecos, Tex.

ect, Fecos, 1ex.
Wiedenback, H. J., c'12. With La Clede Gas
Light Co., St. Louis, Mo.
Wiggins, E. R., m'08. Engineer, Deere and Co.,
Moline, Ill. Res.: Y. M. C. A., Moline, Ill.
Wild, E. C., '06. Engineer, Yazoo-Coldwater
Drainage Project, Mooretown, Miss.

Wile, H. D., e'12. Insurance Inspector, Loeb and Gutman, 4927 Lake Ave., Chicago,

†Wiley, R. R., E. E. '98. President, Flexlume Sign Co., Buffalo, N. Y. Res.: 1453 Niagara St.. Williams, C. H., m '96, M. E. '00, E. E. '04. Consulting Engineer, 1346 St. Paul St., Denver, Colo.

Williams, L. A., m '00. Patent Attorney. 1550

Williams, L. A., m '00. Patent Attorney. 1550
Monadnock Block, Chicago, Ill.
Williams, L. D., c '01, C. E. '09. Purchasing Agent, Mineral Point Zinc Co., 1111 Marquette Bldg., Chicago, Ill.
Williams, S. J., g '08. Inspector, Wisconsin Industrial Commission, Madison, Wis.
Williams, W. H., e '96. Sales Manager, Hart-Parr Co., Charles City, Ia.

Williamson, E. L., c'00. Engineer and Superintendent, Sunny Slope Land Co., 826 Main St.,

Riverside, Cal.
Willison, C. D., e'05. With Milwaukee Land Co.,
Milwaukee, Wis. Res.: 3102 Wells St., Mil-

waukee, Wis.

Willmore, H. E., e '12. Designer, Public Service
Co. 137 La Salle St., Chicago, Ill.

Willson, F. G., e '03. Principal, Wentworth Insti-Willson, F. G., e '03. Principal, Wentworth Institute, Huntington Ave. and Ruggles St., Boston, Mass.
Wilson, E. F., m '84. Patent Attorney. 630 Marquette Bldg., Chicago, Ill,
Wilson, John, c '03. City Engineer, City Hall, Duluth, Minn.
Winkler, W. K., m '07. Secretary, The W. N. Durant Co., Milwaukee, Wis.
Wippermann, Wm., m '08. Sales Engineer, Yarnall-Waring Co., Nelson Valve Co., 30 Church

Wippermann, Wm., m'08. Sales Engineer, Yarnall-Waring Co., Nelson Valve Co., 30 Church St., New York City.
Wise, P. L., c'88. Civil Engineer and Dealer in Real Estate. 8030 Ruth Ave., Portland, Ore.
Wiskocil, C. T., c'12, C. E. '13. Research Assistant, College of Engineering, Madison, Wis.
Withington, A. H., c'13. Draftsman with A. D. Conover, Architect, 36 Tenney Blk., Madison, Wis. Home: 422 4th Ave., Baraboo, Wis.
Witt, Louis, ch'09. Special Examiner of Efficiency, Chicago Civil Service Commission, Chicago, Ill. Res.: 1357 Devon Ave.
Witt, W. H., c'10. Draftsman, Purdy and Hen-

Chicago, Ill. Res.: 1357 Devon Ave.
Witt, W. H., c'10. Draftsman, Purdy and Henderson. 1142 Henry Bldg.. Seattle, Wash.
Wolf, A. M., c'09, C. E.'13. Assistant Engineer, Condron Co., Structural Engineers, 1215 Monadnock Blk., Chicago, Ill.
Wolf, W. P., min'12. Assistant Engineer, M. A. Hanna and Co., Virginia, Minn.
Wolfe, J. H. L., ch'12. Cadet Engineer, Rockford Gas Light and Coke Co., Rockford, Ill.
Wolff, J. F., g'08, E. M.'11. General Engineer, Oliver Iron Mining Co., 608 Wolvin Bldg., Duluth, Minn.

Oliver Iron Mining Co., 688

luth, Minn.

Wolter, B. C., c'75. Dealer in Agricultural Implements. Appleton, Wis.

Wonders, S. D., c'13. Statistician, A. M. Byers and Co., 225 Water St., Pittsburgh, Pa. Home: 212 E. Columbus Ave., Bellefontaine, O. Wood, H. H., m'01. Assistant Superintendent, Stoughton Wagon Co., Stoughton, Wis.

Wood, H. P., c'13. With Missoula Light and Co., Box 653 Missoula, Mont. Home:

Stoughton Wagon Co., Stoughton, Wis.
Wood, H. P., c '13. With Missoula Light and
Water Co., Box 653 Missoula, Mont. Home:
105 E. Wilson St., Madison, Wis.
Wood, L. A., m '11. Assistant Cashier. Fairburn
State Bank, Fonda, Ia.
Wood, W. W., c '76. Register, U. S. Land Office,
Alliance, Neb.
Woodward, W. L., m '94. Lawyer. 18 Marston
Block, Madison, Wis.
Woolniser, H. L., E. '12. Electrical Engineer.
Sloan and Huddle, Madison, Wis.
Woolrich, W. R., e '11. Educational Director, International Harvester Co., Deering, Works, Chi-

ternational Harvester Co., Deering, Works, Chi-

cago, Ill.
Worden, B. L. c '93. With Lackawanna Bridge
Co., Buffalo, N. Y.
Worden, E. P., m '92. Manager, Fred M. Prescott Steam Pump Co., Milwaukee, Wis.
Workman, D. M., m '10. District Manager, Western United Gas and Electric Co., Woodstock,

Woy, F. P., e '03. Consulting Engineer. 416 N.
11th St., Albuquerque, N. M.
Wray, Edward, ch '05, E. E. '06. Publisher, Railway Electrical Engineer. Advertising Bldg.,

Chicago, Ill. Wray, J. G., e '93. Chief Engineer, Central Group of Bell Telephone Cos., 230 W. Washington St., Chicago, Ill. Wright, A. E., c'06. United States Junior Engi-

neer. Amherstburg, Ontario, Canada. Wright, J. D., e '09. Engineer, General Electric Co., Schenectady, N. Y.

Wuerth, H., e '09. Resident Engineer, C. M. and St. P. Ry. Co., Room No 7 Union Depot, Mil-waukee, Wis. Wulfing, H. E., e '05. Superintendent of Outside

Cosmopolitan Electric Co., Peoples Gas Bldg., Chicago, Ill. Wurl, F. L., ch'11. Chemist, Sanitary District of

Chicago, 39th St. and Lake Front, Chicago Ill.

Yager, R. M., c'09. Assistant Engineer, Sanitary District of Chicago, Chicago, Ill. Res.: 6050

Jackson Park Ave.
Young, H. W., e'02. Editor, "Popular Electricity" and "World's Advance," 350 N. Clark

ity" and "World's Advance," 350 N. Clark St., Chicago, Ill.
Young, J. R., m '93. Deceased.
Youngblutt, F. C., c' 06. Assistant Engineer, U. S. R. S. Savage, Mont.
Younggren, R. C., e '09. Chief Electrician, Alleghany Steel Co., Breckinridge, Pa.
Yu, L. C '12.
Zabel, M. W., e '98. Patent Attorney. 1362 Monadnock Blk., Chicago, Ill.
Zabel, W. P., e '09. Foreman, Tungsten Fire Department, Cleveland Wire Works of General Electric Co., Cleveland, O.
Zantow, H. C., m '09. Assistant Mechanical Inspector, Wisconsin Railroad and Tax Commission, Madison, Wis.

Zapffe, Carl, g'07. Geologist, Northwestern Improvement Co., Box 1531, Brainerd, Minn.

Zaremba, Edward, ch'04. President, Zaremba
Co., 707 Morgan Bldg., Buffalo, N. Y.

Zeidlhack, F. S., c'10. Construction Engineer,
Pendleton City Waterworks, Pendleton, Ore.

Pendleton City Waterworks, Pendleton, Ore.

Zeisler, G. H., c '12. Superintendent, G. Schwartz
and Co., Contractors, Rochester, Minn.

Zimmermann, C. I., ch. '03, E. E. '09. Deceased.

Zimmerman, F. R., m '12. Sales Engineer, Johnson Service Co., Milwaukee, Wis.

Zimmerman, J. G., ch '04. Engineer, Thordarson
Electric Mfg. Co., 501-515, So. Jefferson St.,
Chicago, Ill.

Zimmerman, O. B. m '96 M. E. '00. Engineer, So.

Zimmerman, O. B., m '96, M. E. '00. Engineer for International Harvester Co., 11-13 Rue d'Arenberg, Bruxelles, Belgium.

Zinke, P. F., e'04. Assistant Equipment Engi-

zinke, P. F., e 04. Assistant Equipment Engineer, Chicago Telephone Co., Chicago, Ill.
Zinn, W. A., m '98. Secretary, Milwaukee-Western Malt Co., Vice-President Evinrude Motor Co., 163 S. Water St., Milwaukee, Wis.
Zwietusch, E. O., m '86, M. E. '88. Business Man-

ager, Telephone Apparat Fabrik, E. Sweitusch & Co., Charlottenburg, Germany, Salzufer 7. Zwolanek, Jos., m'07. Engineer, International Steam Pump Co., 712 Superior St., Milwaukee, Wis.

## IMPORTANT NOTICE

## MISSING ALUMNI

We are publishing below a list of alumni whose addresses have recently been lost. You are requested to examine this list and give us any information that you may have concerning these alumni:

> F. T. Coup. e '11. A. D. Ehrenbeck. '02. W. S. Hanson, m '05 J. S. Hodge. m '04.

B. Kwauk, c '12. F. H. Lacey, e '01. A. H. Leschke, C. E. '11. M. R. Lora. C. E. '12. H. E. Murray, '10. W. A. North. C. E. '11. H. J. Seyton, c '05. F. J. Sherron, g '05. E. M. Simon, e '07. H. A. Smith, '91. L. A. Terven, e '02.

L. Yu, c '12.

## **BOOK REVIEWS**

Heat. Prepared in the Extension Division of the University of Wisconsin. By E. M. Shealy, Assistant Professor of Steam Engineering. McGraw-Hill Book Company, 239 West 39th Street, New York. xi+262 pp. Price \$2.00 net.

This text is designed to supply the fundamental knowledge necessary for the successful study and understanding of heatusing machinery, such as the steam engine, the gas engine, the refrigerating machine, and the air compressor. It is also a good foundation for advanced studies in these classes of machinery, treated as separate, specialized courses of study. After a careful and painstaking exposition of the nature and the laws of heat, the author devotes the second half of the book to showing the principles of the steam engine, the gas engine, the refrigerating machine, and the air compressor, and the relation of the laws of heat to these classes of machinery.

From a purely typographical point of view the book is in every way attractive, not to speak of its intrinsic merit.

Travel and Description, 1765-1865. Together with a list of County Histories, Atlases, and Biographical Collections and a List of Territorial and State Laws. By Solon Justus Buck, '04. Published by the Trustees of the Illinois State Historical Library, Springfield, Illinois.

One marvels at the amount of painstaking detail work that is evidenced in this volume by Mr. Buck, now professor of history in the University of Illinois. The author's own preface best illustrates what the publication of this exhaustive volume of 512 pages of annotated bibiliography involved:

"When an exhaustive survey of the history of the state, looking toward the preparation of a Centennial History, was decided upon about four years ago, one of the first desiderata appeared to be a knowledge of what was already in print. The writer be-

gan therefore, to compile on cards a comprehensive bibliography of Illinois history. The cards were duplicated and filed in an alphabetical and in a combined topical, chronological, and geographical arrangement. The original plan was to publish the entire bibliography, in its classified form; but the number of cards became so large—there are now over six thousand items listed—and the labor involved in securing exact titles, looking up editions, and preparing annotations was so great that it soon became evident that the entire bibliography could not be published within a reasonable length of time."

After all this preliminary work, the author then decided to limit himself to the three subjects of travel and description; county histories, atlases and biographical collections; and territorial and state laws. The result is a volume that is a monument of completeness and careful detailed workmanship.

The volume is listed as number nine of the Collections of the Illinois State Historical Library, and is a first product of the Illinois Historical Survey of the University of Illinois.

Business Letters. By Edward H. Gardner, Instructor in English in the University of Wisconsin. Madison, Wisconsin. Published by the Author. 95 pp. Price \$1.50.

It is not often that there is crowded into one small volume such a mass of practical, up-to-date information on one of the most important needs in the modern business world,—that of good letter writing—as in Mr. Gardner's new book. The student of business correspondence cannot but recognize the tremendous advantages of mastering the art of writing letters that will not only impress the recipient pleasantly, but bring to the writer an increasing volume of business. The student of this subject is also familiar with the fact that certain

phrases, often ungrammatical and un-English, are used by the average correspondent *ad nauseam*, until their force is lost entirely because of such monotonous repetition.

Mr. Gardner makes two important contributions, among others, to the subject of Business Letters. In the first place, he stimulates the student to an appreciation of the advantages of good letter writing, by numerous and copious illustrations from leading firms, and in the second, he leads the student out of the maze of meaningless and ill chosen stock phrases into an abundance of attractive suggestions for writing letters that are at once consonant with the canons of good English and refreshing to the reader. Mr. Gardner's book is nothing short of a monumental pioneer work that ought to be widely adopted by university classes in that subject.

A new series of post cards, showing natural scenery in the Wisconsin State Parks, has just been published in a most attractive form by the Bishop Post Card Co. of Racine under the direction of B. O. Bishop, '08.

Wisconsin is rich in picturesque scenery—richer in some localities than in others. By careful consideration on the part of our State Park Commissioners these very special points of interest in scenic beauty have been set aside as Wisconsin State Parks. Since this has been accomplished new life and enthusiasm is being added to our state, for thousands of tourists from all parts of the United States are proclaiming that Wisconsin is the real beauty spot of the nation.

On each card will be found the title of the subject, the name of the park, its location, number of acres, and descriptive matter of interest. It is hoped these view cards may find a place not only in every home in Wisconsin, but also that they may find their way to every corner of the earth, gladdening the hearts of many friends and giving to us all a new feeling of pride and satisfaction

that Wisconsin—our home—is so replete with natural beauty; furthermore, that we have had a part in telling it through the distribution of this most interesting and instructive series of Post Cards.

Vocations for the Trained Woman. Agriculture, Social Service, Secretarial Service, Business of Real Estate. By Eleanor Martin and Margaret A. Post. Longman's, Green, and Company. Fourth Avenue and 30th Street, New York. xvii+175 pp. Price \$1.50 net.

This valuable addition to the increasing literature on vocational work for women forms one of the Studies in Economics Relations of Women conducted by the Department of Research by the Women's Educational and Industrial Union of Boston. Most of the facts presented are based upon observations made in and around Boston and in the New England states. But they are of universal application or at least of more than New England interest. That agriculture and real estate, for instance, should command ever increasing interest by women and afford them a handsome sustenance, is of more than local interest. Significant, too, is the desire of college women to embrace secretarial openings. The book is brimful of illuminating statistics and data.

Recent Manifestations of Sectionalism. By Edgar Eugene Robinson, '08. Reprinted for private circulation from "The American Journal of Sociology," vol. xix, No. 4, January, 1914.

In support of Professor Frederick J. Turner's declaration before the Madison meeting of the American Sociological Society, that sectionalism will become more marked in the various portions of the Union as the nation reaches a more stable equilibrium, Professor Robinson shows by a marshalling of significant votes in Congress during the last four years that different industrial and social conditions provoke sectionalism.

## FROM THE CAMPUS

April 28th—F. W. Taylor, efficiency expert of Philadelphia, delivers a lecture on "Scientific Management."

May 1st—The Northern Oratorical contest is held at Madison. A. V. Essington of Illinois is given first honors and Howard M. Jones of Wisconsin second.

It is announced that the senior memorial will again be a loan fund.

Purdue defeats the Badger nine by a score of 6 to 1.

May 2nd—The Wisconsin track team defeats Ohio in a dual meet at Columbus by the score of 79 to 47.

Wisconsin defeats Indiana in baseball by the score of 4 to 2.

May 3rd—The annual fraternity rushing season begins and is to continue for two weeks, pledging to take place on May 16.

May 8th—The Badger nine defeats Northwestern by the score of 4 to 3.

May 9th—Illinois invades Madison with three athletic teams and defeats Wisconsin in track, baseball, and golf.

May 12th—The Wisconsin nine loses to Minnesota at Minneapolis by the score of 6 to 1.

The first open air concert is given on the upper campus. A feature of the concerts this year are the dances presented by the girls' physical education department.

May 14th—Company A, Captain William R. Lacy commanding, wins the annual competitive drill, and Corporal F. M. Childs, Company K, wins the individual competition.

The law students of the university hold a banquet for the law faculty, the members of the local bar, and the members of the state supreme court.

Professor H. M. Kallen's dramatization of the Book of Job is presented by the Wisconsin dramatic Society.

May 15th—Red Domino, the girls' dramatic society, presents Percy McKaye's "Sanctuary" for the benefit of the rebuilding fund for one of the main halls at Wellesley College which was recently destroyed by fire.

May 16th...Sigma Delta Chi, the honorary journalistic fraternity, announces the following spring election: William Foster Clifford, James Robert Frawley, John E. Burke, Harry Grinde, James C. Knollin, Russell Nowels, Jesse H. Reed, and Arthur Prussing.

The French Society presents Musset's comedy "On ne badine pas avec l'amour."

May 19th—Professor Chester Lloyd Jones of the department of political science is selected as one of a group of twelve American educators who will be sent as representatives of the American Association for International Conciliation on a tour of South America the latter part of this month. The tour is planned with the view of bettering the relations between the United States and the republics to the south of us.

Wisconsin defeats the Chicago nine in a brilliant ten inning game by the score of 5 to 4.

May 20th—Jane Addams, Governor Mc-Govern and President Van Hise are among the speakers at the memorial service held in Music Hall for the late Frank Avery Hutchins of the Extension Division of the University.

May 21st—Purdue downs Wisconsin in fourteen inning game by the score of 3 to 2.

Dr. Shosuke Sato, president of the Imperial Agricultural College at Sappro, Japan, and the exchange lecturer of the Carnegie Foundation, gives the first of three lectures at the university.