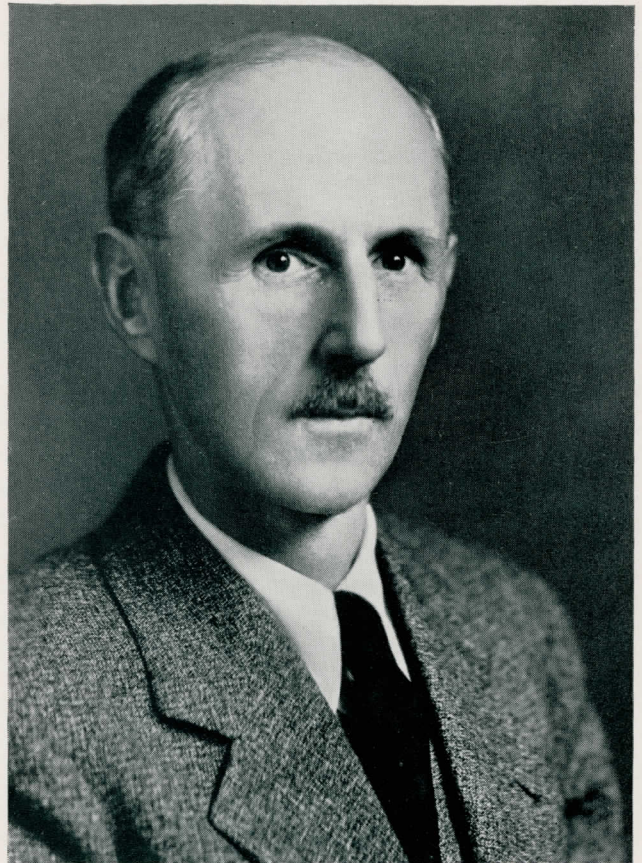


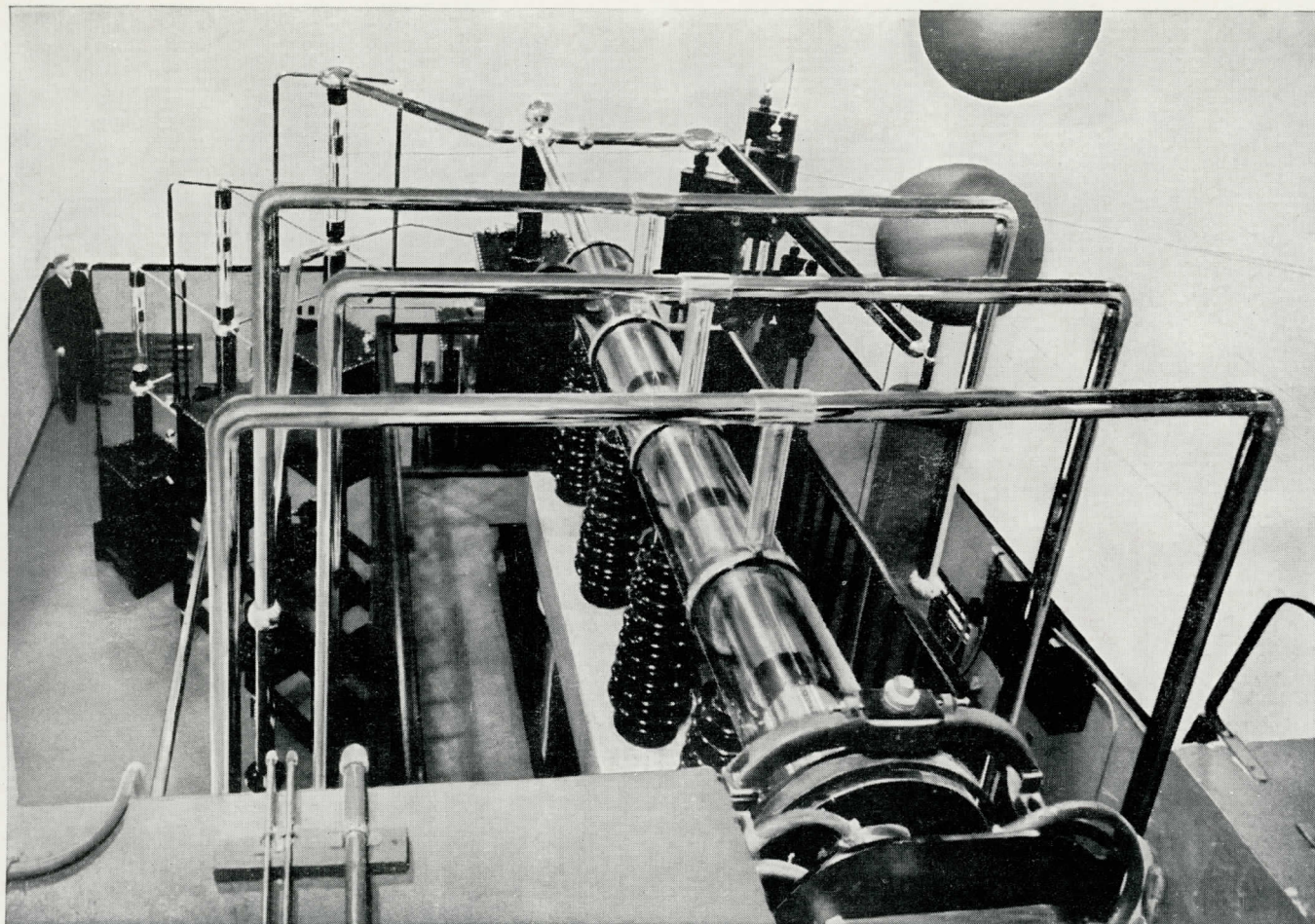
OREGON STATE

SCHOOL OF SCIENCE
EDITION

Monthly

*DR. EARL LEROY PACKARD
has been dean of the school of science
at Oregon State college for the past
four years. He came here from the
University of Oregon campus in 1932
to assume his position as head of the
school, work extensively in research in
paleontology, and develop an effi-
cient school of science known for its
productive research. He is the chair-
man of the general research council
for the state system.*





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nosis and therapy—better tools with which to safeguard your health.

Other developments in the Research Laboratory, in Schenectady, also work for better health. There is the inductotherm, which permits medical science to produce, at will, curative fevers in the patient's body. There are sources of ultraviolet radiation for the treatment of rickets in children. And in all these aids to medicine, the results of years of scientific investigation are being applied to the relief of suffering, to the treatment of disease, to the improvement of the health and well-being of millions of people.

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GENERAL  **ELECTRIC**

EDITORIAL OPINIONS

70 YEARS UNDER ONE COVER

Alumni are all familiar with the fact that their copies of *The Beaver*, perhaps bought reluctantly during student days, have increasing value with the passing of years. How often they are used to "tree" someone in the pictures who cannot quite be placed from the name alone, and at such times one usually lingers with the pleasant memories a glance in the old books recall.

New Beavers are published regularly every year, but of course these hold scant interest for those of us who have gone out away from the campus. But at last there is to be something new under the sun. The Alumni association is sponsoring the publication within the next year of a book that might be thought of as a great "Super-Beaver" published especially for alumni.

The publication of this book is to be in connection with the new six-year plan which culminates with the seventy-fifth anniversary of the founding of Oregon State college. Alumni of OSC will not need to purchase the book as they may obtain it otherwise.

The name of the new volume is to be "The Orange and Black of Oregon State College." It is patterned somewhat after the recently published "Golden Book of California," and "Forward With Stanford," now in course of publication. Oregon State has the distinction of being the first institution in the northwest to undertake such a project.

The new super-annual is planned as a pictorial and word account of the progress of the institution from 1868 to the present. Material will be included which will be recognized as coming from the period of every college generation that has passed through the halls. Much hitherto unpublished material, including many historic pictures recently come to light, will be included in the volume. The alumni can be assured that the book will be fully up to the high standard set by other institutions and by the previous publications from Oregon State. This is not going to be just another book, but THE BOOK that every Oregon Stater will be proud to own.

SCIENTIFIC OREGON STATE

By DEAN E. L. PACKARD

The School of Science has existed but a college generation, and many who have known this institution previous to 1932 may not realize fully that in this brief period a major school has been organized and that its graduates are already finding places for themselves in the field of science.

The School of Science is prepared to offer two academic degrees to students desiring a broad college training and to prepare students definitely interested in fundamental or applied science as a life work. Such a dual function is accomplished by carefully designed curricula, which enable the student to meet his individual objective whether it be but a brief introduction to a science field or the intensified work required of a candidate for a doctoral degree. This broader conception of the training of scientist, medical student, or nurse is in accord with recent trends in higher education necessitated by the increasing greater appreciation by the professions and industry of men and women that are more than scientific specialists.

To these two major educational functions must be added the research function, for the advancement

NEWS AND COMMENT

of science by the staff members not only contributes to the sum total of human knowledge and thus to human welfare, but serves as a stimulus to the graduate student who may be trained to become the researcher of the future.

The new athletic board at the college, although not yet a year old, has some noteworthy accomplishments to its credit. It is putting on a full and well rounded athletic program for the first time in several years and the long-awaited turfing of Bell Field has already begun. These advancements have been made in spite of a shortage of funds.

Higher education in the state of Oregon faces a dark outlook unless the legislature acts favorably on the request of the Board and Chancellor for \$1,317,192 to supplement the amount lost in the shrinking millage fund, due to reductions in assessed valuations. This critical situation is worthy of the deepest consideration of every Oregon State alumnus.

The varsity basketball team seems to be definitely eliminated in the race for the northern division championship, with six losses chalked up against two victories. The low percentage of games won does not indicate the class of the team. The Beavers haven't been overwhelmed in any game. All the scores have been fairly close and in two of the games the team lost because of last second field goals by the opposition. Oddly enough, the two victories were won from the usually high-scoring Huskies of the University of Washington.

The Alumni Association is starting a survey for the purpose of obtaining a complete record of all graduates and former students of the college. In order to accomplish this huge task the Association has enlisted a number of field representatives who will call on 20,000 or more alumni by next fall. Your cooperation with these representatives will be appreciated.

The Oregon State Rook basketball team took a trip to the eastern part of the state recently to play the Pendleton and Baker high school teams. At Baker 1800 people turned out to see the game, which the Rooks won by the score of 36 to 23. The large turn-out was a result of the generosity of two Oregon State alumni and another public-spirited citizen.

Dr. C. J. Bartlett, Bernard Mainwaring, alumni of Oregon State, and Leo Adler purchased tickets for the senior and junior high school students. This was done not only to enable the students to see the game but to swell the proceeds as the net receipts were turned over to the Kiwanis milk fund in Baker.

One of the latest Alumni Association services is the establishment of a club room in the Imperial Hotel in Portland, Room 308. Plan on meeting your friends at this convenient downtown location. If they happen to be a little late it will give you an opportunity to pick up the latest news from the campus as Barometers will be received daily and placed on file for the use of Oregon State men and women.

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OSC One of First Schools to Have Separate Department of Bacteriology

Special Training Given in Soil, Food, Dairy Sanitary Bacteriology and Clinical Diagnosis

OREGON State college enjoys the distinction of being one of the very first institutions of its kind to establish a separate department of bacteriology. This was done in 1899 and the department of bacteriology was established by the late Professor Pernot. For many years after this, in most institutions, bacteriology was considered a part of botany.

Professor Pernot was rather a unique individual trained as a photographer, therefore, familiar with optics and lenses, and a man who was intensely interested in research and a very hard worker. Under extremely difficult conditions in a pioneer institution he developed the work in bacteriology in a most creditable manner.

Professor Pernot is credited with being the first man on the North American continent to find the germ of tuberculosis in fowls. It had been done a short time before in Europe.

Since these early days of bacteriology at Oregon State Agricultural college, the department has grown with the natural development of the institution. It occupies the entire fourth floor of the agricultural building, and here assembled is all the work of bacteriology for the institution, both research and teaching. Because of the varied nature of the subject of bacteriology, students from practically all of the different schools are registered in some of the courses. The work is particularly important to students in agriculture, pharmacy, and home economics.

The students in forestry, engineering and education frequently take work with the department. Research is confined largely to some phases of agricultural problems in bacteriology along with the inevitable questions of public health and sanitation. A great deal of regulatory and educational work is done by the department, partly as a service to the state and partly as a means of bringing current practices to the attention of the students. The department has taken a leading part in improving the quality of market milk throughout the whole state and the department still cooperates with the state department of agriculture in its regulatory and educational work throughout the state.

Students at Oregon State college may take a four-year major course in bacteriology for the bachelor's degree and then continue on for their master's degree. Such students, besides meeting all the requirements for graduation in the institution, get a thorough training in all the sciences basic to bacteriology besides the required specialized courses in their particular field of interest. This may be preliminary to taking work toward the doctorate in some other institution or it may be with a view of specializing in certain specific fields of bacteriology. Some of the fields in which special training is offered are:

Soil bacteriology is an important phase of the training of soil technologists, and is basic to the training of all soils students. Graduates who have majored in this field are qualified to undertake research work in state institutions of higher learning, chiefly in experiment stations, and in various bureaus of the United States department of agriculture. They are fitted by training also for teaching the subject of bacteriology.

Food bacteriology is a field of specialization that trains men and women for research work in the industries, notably in the canning industry, and with other manufactures of food products, where laboratories are maintained employing their own technical experts.

Dairy bacteriology is a field of specialization that is constantly enlarging with the realization of the superior food value of dairy products and the growing demand that these products shall be of the most unblemished and healthful character. This type of specialization fits men for occupations as bacteriologists, chemists in city milk plants, inspectors of dairy products for city, county and state administrative units, and as laboratory technicians for public milk laboratories administered by cities and states. Creameries and other manufacturing plants handling dairy products also employ bacteriologists.

Clinical diagnosis is a field of specialization that concerns both pharmacy and medicine. It is important in the training of pharmacists as it gives them special training in the analysis of all bacteriological products sold in the drug store. It also

qualifies the student to do clinical diagnosis and ordinary clinical laboratory work for physicians. It often proves to be a type of work that serves as a stepping stone to students for continuing their training in biology.

Sanitary bacteriology offers training in all the bacteriological phases of sanitation and sanitary engineering. It fits a man for laboratory work in such fields as water purification, milk testing, sewage disposal and other problems connected with the sanitation of cities.

The field of the bacteriologist, in short, is a broad one. Life insurance companies employ bacteriologists in their medical departments. Public health staffs include bacteriologists as workers in the hygienic laboratory, and also in the field of preventive medicine. The farm, the home, the manufactory, the hospital and the laboratory all afford rich fields for his service.

Former students in bacteriology are scattered all over the United States and other parts of the world. Quite a number are in different phases of regulatory work such as the state department of agriculture, milk inspection staff of Portland, United States public health service, and in different state colleges throughout the country. Some of them are in far off India carrying on good work in bacteriology.

Most phases of public health work and sanitation require college graduates and men are chosen who have had considerable work in bacteriology and chemistry even though they may not have majored in either department.

The new four-year course in fish and game management at the institution is attracting a number of students, and some of these are specializing in the field of disease control which requires considerable training in bacteriology.

A few of the older alumni will be interested in the present activities of former members of the staff. Dr. T. B. Beckwith is now head of bacteriology at U.C.L.A. Dr. Peterson, head of bacteriology at Oregon State during the year 1911 and '12, is president of Utah State Agricultural college. Dr. Alonzo F. Vass is the head of the department of agronomy, University of Wyoming. Dr. W. V. Halversen is head of the department of bacteriology, University of Idaho. James A. Berry is associated with the research laboratory of the government research laboratory located in Seattle, concerned with problems of frozen foods. Dr. David B. Charlton is operating his own laboratory in Portland and is devoting his efforts to bacteriology and chemical problems of food. Dr. Ralph McBurney is head of the department of bacteriology at University of Alabama and is a practicing physician in that city.

MEMBERS of the State Board of Higher Education faced a short docket at their regular meeting January 26, but some of the actions were highly important to Oregon State and other institutions concerned. This was the annual curricula meeting of the board at which all proposals for course changes or additions for the year were passed upon.

The task for the curricula committee was made somewhat easier this year by the creation of an inter-institutional faculty committee to consider curricular matters before they were given to the board. This committee, headed by Dean Rebec of the graduate school, held several meetings and passed upon all proposals for new curricular offerings. In general Chancellor Hunter made their recommendations his own, and these were confirmed in the main by the committee and board, although a few things were referred back for further study. Changes proposed this year were all minor in character.

Next, and of even more immediate importance to the college, was the passing of supplementary budget items totaling \$13,416.23 to care for expenses caused by the record enrollment at the college. Varying amounts were allocated to business administration, agriculture, engineering, for-

Board Passes Supplementary Budget To Care for Enrollment Expenses

Next Meeting Set for OSC Campus to Take Part In Fiftieth Anniversary of Experiment Station

estry, home economics, science, secretarial science and lower division, all of which were laboring under extra student loads beyond what had been anticipated. The second term registration was within less than 50 of the record high established in the fall. Budget additions totaling \$6,803.76 were also allowed the University of which \$4,000 was from funds previously earmarked for maintenance of the new physical education building and \$1500 for carrying the university's share of a new WPA swimming pool project.

A number of gift items came before the board for final attention, most of these involving the medical school. Another gift was the recently announced \$750 annual Goodwin Ori-

ental Good Will scholarship which will support a graduate Oriental student in the school of home economics at Oregon State college. The board voted to have its secretary express to the donor, Arthur E. Goodwin of Seattle, its keen appreciation of this scholarship gift.

The building committee of the board reported that the two new PWA infirmaries of the University of Oregon and Oregon State college had already proved their worth in enabling the college physicians to hold the flu epidemic within reasonable bounds. The committee also reported that detailed plans and specifications were being prepared for the proposed Oregon State college chemistry building and the state PWA officials were confident that actual grant of the funds would be available as soon as these plans are in hand. The delay in completion of the University of Oregon library will make it impossible to use it this school year, it was reported.

Very few personnel changes were acted upon, the only one affecting the college being the appointment of Fred W. Hill, '36, Pendleton, as assistant county agent in Baker county. At the University, Eugene F. Short was appointed to a part-time instructorship in German to relieve Arne Rae, who divides his time between University teaching work and management of the State Editorial association.

The board decided to hold its April meeting on the Oregon State college campus to participate in ceremonies marking the fiftieth anniversary of the founding of the Oregon experiment station. No definite place for the March meeting was arranged.

In recommending the additions to the budget of the two major institutions, Chancellor Hunter read a prepared statement in which he pointed out the critical financial condition of the institutions. The statement follows in part:

"In subsequent items of this docket I am recommending through force of sheer necessity, the allocation of the following funds for the support of the instructional programs in the several institutions: University of Oregon, \$6,803.76; Oregon State college, \$13,-

(Continued on Page 109)

New Infirmary Adequate Replacement For Old Health Service Building

AS WINTER term of 1937 ushered in the largest winter enrollment ever to be registered at Oregon State college, a new and important building was put into use on the campus.

Replacing the old wooden health service shack located down by the administration building, the new \$120,000 infirmary was opened for use just in time to receive an influx of flu patients. The new building is brick-faced and practically fire-proof, the construction being of concrete and metal lath on the first two floors. It is located on Twenty-fifth street across from the commerce building and is more convenient for the dormitory students than was the old structure.

The edifice is dedicated to the memory of Dr. Wendell James Phillips, organizer of the health service in 1916. Dr. Phillips died in service during the world war. His widow, Mrs. Ruth Phillips, has presented a bronze plaque to be installed in the main entrance.

Up-to-date in every respect, the building and service is run on student fees. Cost of the construction was taken care of by WPA funds. The \$3.50 which the students pay entitles each to 15 days of general medical care and an unlimited amount of clinical service. Room service is \$1 extra.

Attractiveness, comfort and modern convenience are all found here. The waiting room is furnished with chairs and lounges of eastern sugar maple finished in walnut with brown cushions and antique white backs. Venetian blinds are at all the windows which are protected by copper screens in metal frames. Artificial lighting is all done by the indirect system. The floors of the waiting room and the halls which extend the length of the building are covered in an attractive and sanitary manner with green and black asphalt tile.

There are accommodations for thirty patients. All of the rooms contain two beds with the exception of one which holds four. An independent full automatic oil burner furnishes heat throughout the building.

The structure was designed by John V. Bennes, a Portland architect, and built by William and L. L. Quigley, Portland contractors. There are still some unfinished portions which will be completed as soon as additional funds can be obtained.

Much interest was shown in the building when it was opened for inspection on January 10. Students, faculty members and townspeople alike were enthusiastic over its beauty and convenience.

How and Why of Many Things Found In Exploration of Physics Realm

Events and Processes of Nature and Application Of Forces and Powers to Machines Studied

PHYSICS probably touches our daily lives as frequently as does any science. Imagine, if you can, what this world would be like without Newton's second law of motion, Faraday's discoveries in electromagnetism, and J. J. Thompson's electron. Without Newton's second law and the clear realization that the acceleration (and not the velocity) of a body is proportional to the force applied to the body, none of the mechanical developments that mark the 18th and especially the 19th century would have been possible. Without Faraday's work there would be no electric motors or generators, and man would be without his quickest and most versatile servant. Without the concept of the electron there would be no radio industry and no near prospect of commercial television.

The applications of engineering are in general developments of some principles of physics. Medicine makes use of many physical instruments and processes; one of the most spectacular phenomena, the X-ray, was put to use by physicians within a month after its discovery. The most common topic of conversation, the weather, forms one of the most fascinating topics in physics; incidentally, long range weather prediction is gradually becoming a reality. Earthquakes and the possibility of their prediction, noise elimination, architectural acoustics, refrigeration, illumination, and air-conditioning all depend upon physical principles. Nor does physics restrict itself entirely to the useful: harmony in music, the study of colors, a large part of photography, appeal to the artistic part of our natures.

Physics has reached its present position among the sciences because, almost from the first, it was a quantitative science. Many of its most important discoveries have been due to measurements involving "the next decimal place." This feature of the subject is absolutely essential to the specialist. The prospective physics major—the student whose interest lies in technical research on fundamental theories of physics—should have a liking for mathematics in addition to an interest in materials and processes and a desire to find out how and why things work as they do.

Adroitness at computation, a knowledge of drawing, experience in any line of shopwork, glassblowing, and the ability to use correct English both when writing and speaking are all very useful to say the least. A real live interest in some other science such as astronomy, chemistry, geology, botany, or zoology makes possible the exploration of the border land between the sciences, or the study of parts of these sciences by means of physical instruments and methods. Needless to say, a very great amount of work remains to be done in these fields.

Not all those who study physics, or select it as a major field, however, need to subject themselves to the program just indicated. Any scientist should know the fundamental physical units and should have some acquaintance with the methods of physical measurements, as tools to use in his own specialty. Many other people will find much of interest and of use in a qualitative view of how and why things work, or in the methods of physics or in its philosophy. A more widespread study of these aspects of

the science may help to bridge the gap between this and the social sciences, especially that of government.

The opportunities for employment of one well grounded in this science are largely in teaching, in government service, and in corporation research. Teaching in the high school, in the junior college, and in the college or university require somewhat different attributes; but in each of these fields there is plenty of opportunity to improve methods and to experiment with the different teaching aides: laboratory, lecture demonstrations, problems, slides and films, sound films, journal clippings, museum experiments, clubs, etc.

Government service is largely research and sometimes leads to administration. Corporation research is of course extremely varied in nature and covers the entire gamut from pure research to the most technical applied research and even engineering development.

For all positions, advanced degrees are becoming more and more necessary. Even in the field of high school teaching, the master's degree is becoming more desirable. Advanced degrees help in obtaining a position. Frequently a man with a Ph.D. receives a definitely larger initial salary than does another man, though the rate of advancement naturally depends upon results accomplished.

The field of physics offers to all an opportunity to ascertain the "why" of innumerable events and processes taking place about us both in nature and in man-made adaptations. To the specialist it offers an opportunity for life-work pleasant, interesting, and challenging.

Zoology Department Courses Basic For Many Other Relative Fields

THE department of zoology includes such academic studies as anatomy, physiology, genetics, evolution, histology, embryology, and the preparatory studies for medical, dental, and nursing careers. The graduate in zoology may aim for government or state work, teaching or research work.

Zoology appeals to those who like to work with living things and is especially valuable to students in the various fields of agriculture, pharmacy, forestry, home economics, and fish and game conservation.

The departmental courses are basic for those preparing to enter the following fields of work: game propagation, predatory animal eradication, rodent control work, animal distributional problems, fisheries problems,

the beneficial or harmful effects of birds, and the like.

No special aptitudes are required of students entering this biological field. The most important requisites for success in zoology are: first, an interest in nature; second, an inquisitive mind; and third, perseverance in mastering the technical details necessary to comprehend living organisms.

The curricula in pre-medicine, pre-dentistry, and pre-nursing include a large number of subjects in the department of zoology. These courses are designed to adequately prepare the student in their respective fields so that when they enter the professional schools they will have the necessary foundations to carry on successfully their specialized curricula.

GEOLGY is a broad subject. Thomas C. Chamberlain, one of the patriarchs of geology, defined it as "the history of the early and its inhabitants," but such a scope for a single subject would seem to overlap all of the formal science fields and perhaps even to invade the social sciences of anthropology and human history.

Nevertheless this definition has merit, for geology not only interprets the mountains, plains, valleys, and other topographic features about us but dips down beneath the crust of the earth to infer the conditions prevailing even at its center. It reaches back through 2000 millions of years of time to the origin of the oldest known mountains, and the geologist joins with the biologists in postulating the manner and time of the origin of life on earth or with the astronomer in determining the early stages in the astronomic history of the planet.

A subject so comprehensive draws heavily from all of the sciences for basic physical and biological data, and the geologist builds upon that foundation a superstructure of inter-related, yet divergent earth sciences, including mineralogy, petrology, geomorphology, paleontology, etc.

The mathematician's contribution to geologic knowledge includes such subjects as statistical analysis of the variations of a microscopic diatom of mountain building; the propagation of seismic waves through the earth's crust; or problems in celestial mechanics relating to the orbits of a new born planet.

The physicist and chemist contribute basic laws and data relating to the sources of energy, the construction of matter, the elemental combinations we call minerals, and their peculiar physical and chemical properties such as those which enhance the beauty of a diamond, the usefulness of a copper ore or give the essential qualities to a clay mineral that make it a safe structural unit of a building.

The biologist, through his intimate knowledge of the living organisms, makes it possible for the students of ancient life to reconstruct from fragmentary fossils such grotesque Oregon animals as the reptilian whale, known as the Ichthyosaurus, the flying reptile from Mitchell, the clawed ungulate *Moropus* from the Mascall beds where it was associated with the giraffe camel, or those outside the boundaries of the state as the sabre tooth tigers of the Rancho La Brea or the shovel-tusked mastodons of the Gobi desert.

These and innumerable other contributions of science enabled the trained geologist to read the record of an ever-changing earth, and to fit into its shifting environments successive faunas and floras, each more advanced and specialized than their

Students of Geology Delve Into Past Present and Future of Universe

Oregon Offers Unusual Array of Geological Phenomena and Materials for Scientific Study

predecessors and each stage bringing life closer and closer to the time when man himself appeared and assumed dominance over the life of the earth to a degree never enjoyed by any of his antecedents.

Thus the science of geology leads one to imaginary or actual vantage points where long vistas may be seen leading into the distant past, revealing the birth of the earth, the origin of oceans, the rise and fall of continental masses, and the development of life from "amoeba to man."

Many such actual vantage points exist in Oregon, for few states exhibit a greater array of geological phenomena nor a wider range of geological materials. Mention need only be made of the great array of volcanoes, probably only dormant, the vast fields of ancient lava and ash deposits covering much of eastern Oregon, the extensive masses of deep seated plutonic masses forming the cores of the Siskiyou and Blue mountains, the evidences of nearly a score of ancient seas now recorded in rocks in southwestern Oregon, the Coast ranges, in the Ochoco region of central Oregon, or in the Blue mountains. The structures of nearly a dozen mountain ranges both ancient and modern, are studied by students at Oregon State college during the field excursions or in their summer session field explorations.

Few states afford such striking geological evidences of past changes of climates as the range from the tropical seas of the Supplee paleozoic or the semi-tropical forests of the Goshen Eocene times to the refrigeration of the ice age when great glaciers flowed far down the slopes of the higher mountains of the state and left their records in the over-deepened valleys or in morainal materials upon the lowlands.

No state excels this in the perfection of its fossil leaves as have been revealed especially by a staff member of the school of science. As a collecting field for three-toed horses, rhinoceroses, creodonts and many less familiar ancient mammals Oregon is known to every trained paleontologist in the civilized lands of the globe.

Oregon's geologic materials are equally important from the more materialistic standpoint. They consti-

tute actual or potential wealth of inestimable value. The presence of these materials remains in soils, underground waters, building materials or in deposits of various metals and non-metallic substances afford the students of the department unusual opportunities to familiarize themselves with the materials and techniques of the economic geologist.

Not only is geology of broad scope, but within that widely ranging field Oregon is richly endowed with a vast array of geological features of extraordinary interest.

HIGHER EDUCATION

(Continued from Page 107)

316.23. These allocations deplete to a point far below the danger limit the small marginal balance that the customary policy of the Board has always regarded necessary for emergency use. . . . The problems, however, which now threaten the College, and to some extent the University on account of the unprecedented increase in enrollment, have become so overwhelming that I am forced to make this recommendation in order to continue the operation of classes in many of the departments to the end of the current year.

"The measures of economy that have been thrust upon us have been so devastating that in many instances the necessary supplies, equipment, and means of operation are no longer at hand unless the present funds are immediately supplemented. In some departments equipment, worn to a point of unusableness for lack of repairs, is unavailable for the immediate necessities of instructional procedure.

"Many of our classes are severely overcrowded and unless additional financial assistance can be forthcoming, serious injury to our instructional program will immediately result. Official reports indicate that instruction is already impaired by a great number of over-sized classes. At the University there are 11 classes of 100 or more, 34 classes of 75 or more while at the State College there are two classes of 200 or more, 18 classes of 100 or more, 29 classes of 75 or more."

IN THE field of entomology, or study of insects and insect life, much has been accomplished in the past few years. As a contribution from the department of entomology at Oregon State college, a great deal of research work has been done and many bulletins and articles printed.

The most recent writings done include bulletins on "The Holly Scale and Other Insect Pests of English Holly in Oregon," by J. R. Roaf and Don C. Mote; and "Observations on the Life Habits of the Omnivorous Leaf-Tier," by Don Edwards, Kenneth Gray and Don C. Mote. Both of these were printed in The Journal of Economic Entomology, one in 1934 and the other in 1935.

Recent bulletins include "Control of the Western Peach and Prune Root-Borer," written in February, 1935, by Don C. Mote; "Tree Borers and Their Control," also written in February, 1935, by Don C. Mote; "Cutworm Control in Oregon," March, 1935, by Don Edwards; "The Black Widow Spider," June, 1935, by Don C. Mote and Kenneth Gray; "Strawberry Root-Wevil Control in Oregon," January, 1936, by Don Edwards and Kenneth Gray; "The Blackberry Mite in Oregon," June, 1935, by Don Edwards, Kenneth Gray, Joe Wilcox and Don C. Mote; "Sprays, Their Preparation and Use," June, 1935, by Kenneth Gray.

"Forest Insects," one of the American Forestry Series, came off the press in 1936, with one of the four authors being Dr. W. J. Chamberlin, associate entomologist in the entomology department on the campus.

Extensive Research Work Contributed By OSC To Advance of Entomology

Graduates and Professors Release Bulletins And Articles, Hold Prominent Jobs In Field

Six graduates of Oregon State in entomology are now employed in the department. Four, Don Edwards, '31, '36 M.S.; Kenneth Gray, '30, '35 M.S.; Sidney Jones, '26, and B. G. Thompson, '18, '24 M.S., are working cooperatively with the experiment station and the government. Dr. Chamberlin, '15, is also with the department as an associate entomologist. He received his M.S. degree here in 1921. Joe Schuh, B.S., '34, and M.S., '36, is an assistant in the department.

Roland E. Dimick, B.S., '26, M. S., '31, did extensive and important work with earwig parasites from 1929-31 and is now head of the department of fish and game management at O.S.C.

Other outstanding graduates of this department who are now "making good" in various localities are as follows:

Tom Allen, B.S., '27, M.S., '29, is working in entomology at the experiment station in Madison, Wisc.; Eldon Ball, '33, is now with the biological

survey, working in connection with the insects and other parasites affecting wild animal life, and is stationed in eastern Oregon; Harold Bowerman, B.S., '31, M.S., '34, is working with the forest service on forest insects; E. G. Davis, '26, is an assistant entomologist, working on cereal and forage crops at Tempe, Ariz.; David Dunavan, '25, is assistant professor of entomology at South Carolina State college, Clemson, South Carolina; J. C. Elmore, '24, is now working on truck crop insects at Alhambra, Calif., as an assistant entomologist, with M. W. Stone, '27, a junior entomologist, assisting him.

Max England, '28, is with the California department of agriculture, Escandido, Calif.; J. C. Evenden, B.S., '14, M.S., '35, is the entomologist in charge of the forest insect station at Coeur d'Alene, Idaho; C. M. Gjullin, M.S., '30, is an assistant entomologist with the federal bureau of entomology and is working on mosquito control; O. A. Hills, '27, '29 M.S., is an assistant entomologist with the bureau of entomology, stationed at Phoenix, Ariz.; George Hopping, '26, is now an assistant forest entomologist in British Columbia; Philip C. Johnson, B.S., '29, M.S., '31, is now with the bureau of entomology, working in the forest insect division, stationed at the University of California, having the rank of junior forester.

James R. Roaf, '32, came here from Utah and is now employed as a government worker in entomology at Beulah, Ore.; H. A. Richmond, '28, is working in forest entomology for the Canadian government; John O. Wieting, B.S., '32, M.S., '34, is studying for his Ph.D. degree at the University of California; Joe Wilcox, '25, '28 M. S., is an associate entomologist with the bureau of entomology and is in charge of truck crop pests, stationed at Alhambra, Calif.; Don A. Wilbur, '25, is an assistant entomologist at Kansas State college, Manhattan, Kan.; Kwan Lun Wong, M.S., '33, is now head of the department of entomology at Lingnan university, Canton, China, and has been sending a number of Chinese boys to specialize in entomology here since he left a few years ago; and Converse York, '26, is an entomological inspector for Los Angeles county in California.

Universal Constituent of Living Cells; Pantothenic Acid Definition

By ROGER J. WILLIAMS
Professor of Chemistry

PANTOTHENIC acid is apparently a universal constituent of living cells whether of plant, animal or bacterial origin. It derives its name from the Greek, meaning "from everywhere." Its existence was discovered in the author's laboratory a few years ago and its isolation in practically pure form is now reported.

Several hundred pounds of liver have been put through an elaborate process in the laboratory in order to obtain a supply of pantothenic acid for analysis. The later stages of purification are difficult to carry out and only 20 milligrams of the nearly pure substance have so far been obtained. This amount of material is about equivalent in weight to the trimming from a thumb nail or to less than a half a drop of water. With this small amount of material at least a dozen analyses have been made. Several parts of a pantothenic acid molecule can now be accurately pictured by the

chemist, but study has not gone far enough to give a complete picture of the whole molecule. It contains carbon, hydrogen, oxygen and nitrogen but no other element and is chemically somewhat related to acids such as are obtained from proteins.

The peculiar quality which makes pantothenic acid interesting is its ability to act as a growth regulator. It was discovered in connection with its remarkable stimulating effect on yeast growth but it has since been found to have a stimulating effect when used in infinitesimal amounts on the growth of various types of plants and single celled animals.

The problem of how growth is controlled in living organisms has long been a fascinating one, and from the practical standpoint the fundamental facts regarding uncontrolled growth observed in tumors need to be understood before the problem of cancer can be solved. In recent years, the importance for growth of infinitesimal

(Continued on Next Page)

Students to Study in New Institute Of Marine Biology at Coos Head

School to Be Used as Field Camp This Summer, Specialists to Carry on Research at Station

IN SPITE of the deluge of snow and rain on the campus the past few weeks, the science students and instructors have been looking forward to the summer months when the new Institute of Marine Biology school opens at Coos Head, on the bay near Charleston.

Truly a biological observatory, the station is situated in the midst of an area which has an abundance of marine, fresh-water and land animals and plant life. The biology student, needing the same first-hand knowledge of the materials he studies as the engineer, the field geologist or the artisan needs, will be able to study the marine life in its natural environment. Physiology, embryology and ecology can best be presented in laboratories near available sources of the live animals and plants. For this purpose Coos Head—meeting place of faunas and floras characteristic of the northern and southern Pacific coast—offers an excellent natural laboratory.

The school will be conducted this summer as a field camp. A part of each day will be devoted to exploring the rock-pools along the ocean front, studying the life of the sandy or muddy beaches, visiting the oyster beds of Coos Bay, or collecting plankton within the bay. Specimens obtained on the trips will be studied and determined as part of the laboratory program. Both undergraduate and graduate work, including both major and minor theses problems, may be undertaken by students who are qualified for the work, Dr. E. L. Packard, director of the project, said.

One or more week-end trips may be taken to points of general and biological interest, such as Crater Lake or the redwood forests of northern California. Shorter trips will be taken to the Coast Range forests, the inland lakes and to the fishing grounds off the Oregon coast.

Cottages and buildings constructed by the Civilian Conservation Corps—renovated but not remodeled—will be used as residences. Dr. Packard suggests, however, that students not willing to accept inconveniences do not register this season.

During the past year, a 500-man shift worked for several months improving the camp site, road and trail

building, and in reducing the fire hazard by removal of much down-timber and dead snags.

Dr. Packard and his colleagues are looking beyond this first summer session at the coast station to the time when the approximately 85 acres of land deeded to the University will become a permanent research station with a regular staff the year around to assist students, both graduate and undergraduate research workers.

Specialists in the different fields of biology may reside at the station to carry on research there when permanent facilities are established. A method of remodeling the present buildings to permanent structures is the aim of the staff.

Facts Concerning Newly-Discovered Pantothenic Acid Told by Finder

mal traces of various chemicals known as vitamins has been appreciated. Pantothenic is similar to a vitamin and its occurrence is more widespread than any vitamin is known to be. It appears to be fundamental to life and particularly to growth.

Many sources might be used for the preparation of pantothenic acid—yeast, rice bran, other cereal products, eggs, milk. Liver was chosen because it was a rich source and at the same time easily handled in the early stages of the process. A fact indicating the universal importance of pantothenic acid is that the livers of hogs, cattle, sheep, dogs, rats, chickens and human beings all contain about the same amount. Pantothenic acid has been found in every tissue of the body. The liver acts as a storehouse where pantothenic acid is stored in a combined form. Muscle tissue and brain tissue are relatively rich sources.

When yeast cells are deprived of pantothenic acid they not only lose their ability to grow rapidly but also their ability to respire (breathe) at a normal rate. Yeast cells normally have two types of respiration—one in which they breathe in oxygen and

Miles of trail and road have been built by the college with a view to a beautifully arranged school grounds, including residence buildings, classroom buildings and a quarter for experimentation. Ranking as another campus of the state system of higher education, it will be similar to other experiment stations and similar to the larger campuses in the instruction it offers to students.

The establishment of the school has long been the hope of University and Oregon State science instructors, and especially of Dr. Packard, who received administrative authority for the project when transfer of advanced science work several years ago brought the school to the Oregon State campus. Since the basic investigation of animal and plant life processes involve biochemical and biophysical phenomena, both chemists and physicists will be appointed to the staff.

The advanced problems and research courses of wide range of subject matter may carry credit up to ten hours, which is the maximum that may be earned during summer session. Men and women students who can present at least one year of a biological science may register.

breathe out carbon dioxide as higher animals do—the other involves obtaining the oxygen from the sugar of the food and breathing out both carbon dioxide and alcohol. Both of these types of respiration become very low in yeast with an insufficient supply of pantothenic acid. It is probable that pantothenic acid plays a role in the respiration of all kinds of cells.

The effects of pantothenic acid on young alfalfa seedlings is particularly interesting because the stimulation from the merest trace can be observed within a day or two after sprouting. The amount to which a single plant has access need not be more than 1/50,000 part of a milligram—and a milligram is 1/10 the weight of the head of an ordinary pin. The bacteria which attach themselves to the roots of alfalfa derive a vitamin-like substance from the alfalfa and in turn produce pantothenic acid which stimulates the growth of the alfalfa seedling.

Further experiments are in progress to prepare more pantothenic acid so that its complete chemical structure can be learned. This will make it possible to synthesize the acid in the laboratory. It can then become available in unlimited quantities rather than in milligram lots.

OREGON State's entrant in the 1937 Northern division conference basketball race is a team that always comes close but never quite arrives. In 11 trips to the maple battle floor the Orangemen have on all but three occasions put up a mighty scrap during the early stages of the game only to fade out in the latter part and go down to defeat.

Amory T. Slats Gill and his Orange cagers occupy the lowest position in the conference standing that an Oregon State basketball team has held for the past six years. Not since the 1930 season have the Orange finished lower than third place.

Twice in the last six seasons the Oregon Staters have won the league title. Therefore, it is rather an unusual experience for Orange basketball fans to see the Beavers in the next-to-the-last spot.

No definite reason can be assigned for the Oregon State string of losses. On every occasion the Orangemen display a good brand of basketball, but not quite good enough. Witness the fact that in the games played so far this year the Orangemen have only scored eight points less than opponents.

All of the Orange games have been relatively close affairs, only one lopsided contest being recorded so far this season. In the first encounter with the University of Idaho, the Orange went wild and ran up a 25-point margin over the Vandals.

In the second tilt with the Huskies in Seattle the Orange courtsters lost by the widest margin, a 13-point gap separating the two teams at the end of the contest. However, the Oregon State cagers came back for revenge in a later game to defeat Washington by an 18-point margin.

Subject of Botany Divided Into Many Technical Phases of Plant Study

THE term "botany" in its broadest sense includes the scientific study of all phases of plant life. In the earlier history of botany it dealt largely with the identification, classification and naming of plants and especially with their medicinal properties, fancied or real. As the scientific study of botany developed many different fields in the study and investigation of plant life came to be recognized.

Plant physiology deals with the life processes occurring in plants; plant ecology, with the manifold relations of plants to their environment; plant anatomy and histology, with the gross and minute structure of the plant

Orange Basketeers Now Hold Lowest Position in Conference for Six Years

Fadeout in Latter Part of Games Makes Total Now Three Out of Eleven: Team Down Eight Points

Oregon State started the present campaign in a very disastrous manner, dropping the first five encounters. The opening series of the season, played on the Orange court, saw the Washington State college quintet take a double win over the Beavers. The first fray was an exciting tilt that saw the Cougars pull out in the final minutes of play with a 23 to 20 victory. Again the following night the Cougars from Pullman had too much finishing drive for the Orange and took a 37 to 32 decision.

The next encounter was the first of the annual four-game "civil war" series with the University of Oregon. In one of the most exciting battles ever staged on the Orange court, the Webfoots sank a last-second "prayer shot" to take a single point win, 35 to 34.

Making their first northern invasion of the campaign the following week, the Beavers took it on the chin from the Washington Huskies on two successive nights, the first a 31 to 37 affair and the next a little more bitter pill, 38 to 28.

Returning to the campus and with only three days of practice, Slats Gill

turned loose on the Huskies in the return series at home a completely rejuvenated outfit, a team that looked as if it had finally arrived. In the first night's game the Orangemen, playing almost flawless ball, defeated Washington by a 23 to 27 count. The next night the Orange were "hot" and ran up a 40 to 22 win over the befuddled Seattle lads.

At this point in the season, Oregon State was conceded to be finally started and entered the second game with Oregon the next week with the paper odds even. Employing a surprise zone system of defense, the Webfoots stopped the Oregon State offense cold and rolled to a 44 to 31 victory over the Beavers.

Idaho invaded the Orange campus next and split even with the Staters in a two-game series. Trying desperately to garner a win over the Oregon Ducks in the third game of the series last week, Oregon State failed in a 33 to 26 loss to the league-leading University of Oregon quintet.

Five games remain on the Orange schedule, one with the University of Oregon and two each with Idaho and Washington State. Although it will make little difference to the Oregon State position in the final standings, Coach Slats Gill and his charges would enjoy a win over the Webfoots in the next and final encounter with the Ducks.

With this end in mind, daily practice sessions and experiments with various combinations are the order of the day on the Orange court. The regular five of Hub Tuttle and Art Merryman at forwards, Earl Conkling at center and Mal Harris and Elmer Kolberg at guards are being closely pushed by a second aggregation.

Outstanding on the reserve combination are Ike Wintermute, Nello Vanelli and George Kuvallis, forwards; Bob Rissman, center, and Bud Wagner, Chet Kebbe, Howard Lyman and Jay Hollingsworth, guards.

Oregon State will complete the present season with an Inland Empire jaunt, playing the University of Idaho at Moscow and then jumping nine miles across the border to battle the Washington State Cougars in the final series of the season.

(Continued on Next Page)

Mathematics Important Factor in Scientific Progress and Discovery

Tribute Paid Prof. McAlister for Service to State; Essential, Advanced Instruction Given

BACK of the scenes, inconspicuous but essential, mathematics plays a vital role in scientific progress and discovery. Whether it be the humble arithmetic of the banking house, the formulas of statistics and finance which make insurance a reliable business instead of guesswork, the trigonometry by which the surveyor lays out railroads, highways, or canals, the formulas and tables which make possible navigation by sea or air, the intricate and complex calculations required in the design of a bridge or dam or power plant, or the electrical equations which led to wireless and radio, or the differential geometry on which Einstein built his theory of relativity, mathematics does its share in promoting material prosperity and advancing the boundaries of knowledge.

Its part is none the less essential because it is so generally unrecognized and ignored. High tribute is justly given to a Marconi or an Einstein for his contributions, but who can even name the mathematicians that made such success possible? When we see a beautiful arch bridge, we praise the engineer but do not see the laborious calculations that went before to insure its strength and safety.

The department of mathematics at O.S.C. serves a double purpose in providing instructions in the essentials for the large number who will need some mathematics in their technical courses, and also in maintaining advanced work for the few who go into specialized technical or theoretical fields.

The staff in mathematics, with diversified interests, training, and experience, is well qualified to give the particular service which the department should afford, containing on the one hand a number of experienced and popular teachers who are unusually successful in the important if unspectacular task of imparting to freshmen and sophomores the fundamentals of mathematical training, and on the other hand some whose primary interest lies in the advanced and research field.

Oregon State college is the alma mater of no less than five of the best liked members of the staff: Professor

Tartar, 1907, now retired; Professor Johnson, 1897, for many years head of the department; Professor Beaty, 1903, whose courses countless engineers remember with pleasure; Professor van Groos, 1899, a most conscientious teacher; and Professor Beard, 1899, whose band, incidentally, is the pride of the college.

Other members of the staff include Dr. Kirkham, Indiana, who gives both the elementary and advanced work in probability and statistics; Professor Williams, a popular teacher who handles higher algebra and geometry; Professor McAlister, Oregon, who gave graduate work in mechanics, electricity, and hydrodynamics; and Dr. Milne, Harvard, head of the department and co-author of the text adopted for Unified Mathematics. Among the various research articles published by Dr. Milne, one in particular is worthy of mention. It provides a simple and practical numerical method for obtaining solutions of differential equations, and has already been included in a number of standard books on differential equations.

It is fitting at this time to give more than passing tribute to Professor McAlister, who retired at the close of the fall term after more than forty years of distinguished and scholarly service to the State of Oregon.

Professor Edward H. McAlister graduated from the University of Oregon with the class of 1890. During the next year he was appointed tutor in Latin and mathematics at the University, and has given continuous service in the state's major institutions of higher education for nearly forty-five years. At the University he served as professor of civil engineering, dean of the college of engineering, and professor of mechanics and astronomy, and at the college for the past four and a quarter years as professor of mathematics.

Professor McAlister has by assiduous study made himself a notable scholar, recognized as fully on a par with those who have had the advantages of modern graduate schools and who have been the recipients of their degrees. His specialty has been applied mathematics with particular reference to advanced work in me-

chanics, including such difficult fields as hydrodynamics and elasticity.

His work as a teacher has been characterized by carefulness of preparation, clarity of presentation, and intelligent adjustment to the preparation and needs of his students. Wise and helpful as a teacher of elementary classes, he has been a genuine inspiration to his advanced students.

He has a creditable list of publications, some of a general character, some suggested by his engineering interests. He was a pioneer in establishing the structural characteristics of fir timbers. His most spectacular piece of work, which exhibits his true character as a research worker, was his paper on "Thrusts, Moments, and Shears in Elastic Arches," published by the University in 1925. This paper is the authoritative basis for the intelligent design of arch bridges, and would by itself constitute an adequate justification for the existence and maintenance of the State System of Higher Education.

While Professor McAlister has retired from the exacting duties of active teaching, he has by no means "quit." He is building a home amid lovely surroundings on the McKenzie river near Blue river, where he will continue his intellectual interests by completing his big work on Tables of the Elliptic Integrals, which may be varied from time to time by light reading in the fields of elasticity and celestial mechanics. His home will be the Mecca of many a friend, colleague, and student, who values his genial friendliness and thorough scholarship.

BOTANY DEALS WITH PHASES OF PLANT LIFE

mental knowledge derived from an intensive study of the various phases of botany described above.

The botany department offers several different fields of endeavor: (1) A graduate major field for qualified persons who desire to become expert plant pathologists, physiologists, ecologists, cytologists, taxonomists, etc., qualified to hold research jobs in the U. S. department of agriculture or in state agricultural experiment stations; (2) training for teachers of botany either in college or high school; (3) undergraduate and graduate training for students in agriculture and forestry who need more fundamental training in ecology, physiology, taxonomy, pathology, etc., in order to better fit themselves for certain positions which require specialized types of knowledge of a botanical nature.

Many examples of the importance of these various botanical fields might be cited. Recently a well known horticulturist of the U. S. department of agriculture who is breeding thousands of strawberry plants

with the view of developing better varieties came up against the problem of testing these selections as to their resistance to certain virus diseases of strawberries. To help solve this problem he employed a graduate student who is working for his Ph.D. degree in plant pathology. At the present time this student holds a part-time job as research assistant in plant pathology and is testing these strawberry plants. This job enables him to continue his studies toward the doctorate degree.

Students who are preparing themselves to enter various fields of agriculture, range management, wild life conservation and control, erosion control, forestry, land use planning, park service, and plant introduction and breeding find that the botany courses in ecology, range and pasture botany, systematic botany, plant physiology, plant pathology and plant cytology furnish them just the type of fundamental knowledge needed to supplement the training received in their major departments.

Students preparing for seed testing jobs with government or state institutions or with commercial seed companies find the courses in systematic botany of great value to them.

Workers in horticultural positions who are engaged on such problems as that of tree growth find that fundamental training in plant physiology is indispensable if they are to make the best progress in these studies.

The botany department staff performs many services for various interests of the state. The herbarium and its curator give indispensable aid to county agents, farmers, and various departments of the college by identifying thousands of plant specimens sent in every year. The ecologist is frequently called upon to identify range, pasture, and poisonous plants and to furnish other information and advice on these subjects.

The plant physiologist is often consulted by agriculturists, engaged on practical problems, who desire information and advice on the fundamentals of plant physiology upon which their practical research must be based. In the field of plant pathology numerous inquiries and requests for information about plant diseases are constantly coming to the department. Likewise in the fields of paleobotany, morphology, mycology, anatomy and cytology staff members are frequently called upon to furnish specific information to someone who needs this knowledge in order to carry on his work in other fields.

When one comes to college today with an idea of understanding the plant, its growth and reproduction, one will study these plant sciences separately and collectively as botany. If one plans to pursue any of the applied studies in agriculture and forestry one will find a knowledge of the

Chemistry Termed as Material Aid To Cultural Viewpoint of Student

Study of Chemistry Deals With Many Phases Of Processes and Events of Every-day Life

TO THE average person entering a chemical laboratory for the first time, there comes a feeling of confusion and disorder. He will observe a variegated collection of glasses of all sorts, interspersed with apparatus of iron and brass, all in a more or less confused jumble. There is also about the chemist himself an air that recalls to mind stories of the old alchemists and their secretive places where they, for a long time, strove to discover the transmutation of the baser metals into gold, and to discover the "elixir of life" and the "philosopher's stone."

Further acquaintance, however, with the chemist and his utensils removes all of these feelings and promotes an interest in what is taking place throughout both the animate and inanimate world. He wonders why so little has been said of the chemist and his work in bringing things about that add to the ordinary individual's pleasure and his profit.

Not so many years ago very little information of a chemical nature reached the general readers, and what did reach them was couched in language they did not understand. Nowadays scarcely a journal of any standing or reputation has an issue that does not include a column of science notes. The daily newspapers are covering subjects that a few years ago were utterly beyond their scope. Even the small dailies during these times are willing to give space to science notes provided they are put in such language that the editor can understand them. There is scarcely an active industry that does not solely depend upon chemical principles, and which would soon become utterly outdated if it did not keep up with modern chemical research.

One of the main objects, however, in chemistry from the cultural view-

point is to provide the chemistry student with information that will lead him to understand the causes of many chemical effects and to be fully able to appreciate what is going on about him. For example, he should be able to appreciate food chemistry both in its manufacture and use, and to decide which of the multitude of food-stuffs are appropriate for his individual physical needs. He should be able to distinguish between good and bad water, and know how the harmful constituents are removed.

He should have some knowledge of the special alloys such as bronzes, brasses, and some of the highly efficient steel alloys that are now going into the construction of machinery of all kinds, and which are being used in the manufacture of automobiles and their accessories, and in distillation and how the various grades of gasoline are made, both by blending and fractional distillation.

In addition, he should have a good knowledge of agricultural pursuits, knowing what is meant by "sour soils," "sweet soils," etc., and what and how to apply to bring about conditions that will aid plant growth. He should understand the laws of fertility and the appropriate plants for given soils. He should be able to understand what is being done in the field of the newer medicinal remedies.

Textile chemistry is very alluring, and the dyes that are used to color them. After a study of the constitution and manufacture of the dyes and plastics, the methods used in the manufacture of artificial textiles will be understood—how, for instance, cotton is mercerized to resemble silk, of what substances rayon is composed, how celotex is manufactured, etc. Then he should appreciate the manufacture of the plastics—how Duco differs from the older varnishes, and how the newer plastics differ from Duco—all of them products of the research laboratories, and originally made from cotton. As to the dyes, of which there are thousands, the chemical laboratory is entirely responsible for most of them. It is true that many of the natural dyes are still being made, but only in countries that have very, very cheap labor, and even they cannot compete to any great extent with the

(Continued on Page 124)

THE
ORANGE & BLACK
OF
OREGON STATE COLLEGE

1868—1938

JOHN ROBERT DOE

(YOUR NAME IN GOLD)

OAC FIRST 70 YEARS OSC

BRUSH the cobwebs off those old photograph albums and see if you can't find a picture that should be displayed in the pictorial history of Oregon State college. In 1938 the Orange and Black will be published. This great book will be a pictorial record of Oregon State's first seventy years.

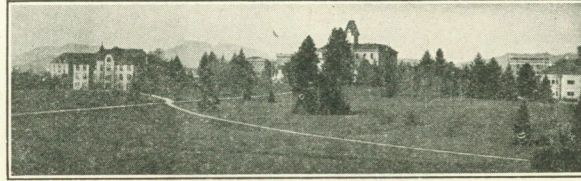
A master Beaver. The life of Oregon State in one volume. Oregon State is your college and you played a part, no matter how important or insignificant, in its history. From the time OSC was housed in one building in the down town section of Corvallis to the time it was moved up on the hill and all during its growth and development there, students from every section of the continent and from across the water have made this college what it is today. They have come here, some of them generation after generation, for their education.

It was not only in the past few years that cameras were invented and students were interested enough in their college days to take pictures of campus activities and the campus itself. In the days of old, this was done too—and that is just what is needed for this collection of pictures to accurately fill the book with interesting and memorable reproductions of Oregon State in the embryo stage.

Look through your old pictures and see if they bring to you memories of Oregon State and your college life. If they do, there are other alumni who would feel the same recollection for he too went here and participated in just such activities, studied in the same buildings and possibly from some of the same deans. And then there are people who never were lucky enough to attend Oregon State. Maybe they had ambitions when they were young but never realized them. Through this book they can see what Oregon State was like when they were of college age and how much it has progressed and advanced since then.

The picturization of an institution of higher learning from its beginning to present status should teach a lesson of appreciation for the opportunities and advantages a young man or woman has today as compared with that of their parents and grandparents. Send us some of your old pictures of Oregon State so that a contrast may be made of the present and the past. Not a distinct contrast either, but a continuous parade of OAC to OSC in pictures.

Pictures of what? What do you have pictures of? Student life, personal or public; student activities, fraternal or college, athletic or academic; campus buildings; professors; just anything interesting that will add to the value of



the picture collection as a reproduction of Oregon State through the first seventy years.

Below is a good start, but only a start. You can help us complete this start and fill in many of the blank spaces with pictures you have of the college in its earlier days. Don't neglect to send them because of fear of not getting them back, for every picture submitted to fill a place in this pictorial history of Oregon State will be returned to its owner in fine shape.

Don't wait too long before you send in your contribution, for work has been started on the book.



Oregon State through the ages--The group above gathered in front of the college way back in 1874 to have their picture taken. The next group was snapped in 1914 and below them is the Lady of the Fountain, a statue which many of you remember when she adorned the lower campus

Beaver Tales

HOME FOLKS IN THE FLOOD SECTION

Here is a first-hand account of life in the flood districts—from Lois Thomas, wife of Harold Thomas, '36 graduate in engineering. The couple live in South Fort Mitchell, Kentucky, across the river from Cincinnati, Ohio.

"I thought you might like to hear a little on the flood from someone who was on the scene. It was such a terrifying yet interesting experience to us.

"Living in a suburb of northern Kentucky, we lost our electricity on a Sunday night and so couldn't cook, have our refrigerator, lights or radio. We couldn't even buy candles as Hal spent two hours scouring the town, to find that every store was sold out. We ate cold meals for three days and then our electricity came on—brought in from Dayton, Ohio, and other cities. We had water for two days after Sunday for only two hours a day, then it went off completely. It was 11 days until a thin, muddy stream came through the pipes again; no baths for about 600,000 people for almost two weeks and very little even to cook with. Everyone used paper plates and cups as you couldn't waste precious water on dishes.

"People were very calm after the first exciting days and actually joked about the funny foods we had to buy—fresh meat was scarce and you'd go into some meat markets and see nothing but turkeys and chickens, a strange meal for flood time. Other nearby cities hurried food into Cincinnati so we never had a food shortage although we couldn't be particular what we wanted.

"Though Hal's plant (the Keleket X-Ray company) is six blocks from the river and on high ground it stood in nine feet of water. It is now covered with slimy mud and will take months of work to get it back into operating condition again.

"I got a job as private secretary to the president of a large dairy that supplies the dairy products for one-third of Cincinnati. We were open all during the flood, supplying the Red Cross. We generate our own power and have a deep well, so were not hampered. I couldn't get to work for several days as the only passable bridge was used only in emergency by food and water trucks."

VITAL STATISTICS

BIRTHS

Blackmore—To Mr. and Mrs. E. Morris Blackmore (Margaret Pratt, '27), 7523 N. Omaha, Portland, a daughter, Ruth Gretchen, was born January 12.

Smythe—To Mr. and Mrs. Loyd B. Smythe (Veta Stover, '29), Canby, a second son, David Loyd, was born January 20. Smythe, '26, has a poultry farm at Canby.

Farrell—To Mr. and Mrs. Miller S. Farrell, 3206 Southeast Tolman, Portland, a daughter, Sandra, was born December 7. Farrell, '22, associated with the Charles W. Sexton company, has offices at 1101 Board of Trade building, Portland.

Handford—To Dr. and Mrs. William Handford (Jane Elkins, '33), Caldwell, Idaho, a daughter, Helen Handford, was born January 22. This is their second daughter. Dr. Handford is a '31 graduate of the University of Oregon medical school.

Thomas—To Mr. and Mrs. James B. Thomas (Justina Newton, '29), Amity, a daughter was born January 20. This is their second daughter. Thomas, '24, is Smith-Hughes agriculture instructor in the Amity high school.

Sheythe—To Mr. and Mrs. Martin B. Sheythe (Alfreda Janzen, '34), Junction City, a daughter, Geraldine Frances, was born January 19. Sheythe, '33, teaches in the Junction City high school.

Morrow—To Mr. and Mrs. Guy Morrow, Corvallis, a son was born January 18. Morrow, '29, has an interest in a coast truck line.

Hale—To Mr. and Mrs. Millard Hale, Morgan Hill, Calif., a daughter, their third, was born in October. Hale, '25, is employed by the Morgan Hill Lumber company.

Wilson—To Mr. and Mrs. Harry Wilson (Wildes Edwards, '27), Nogales, Ariz., a daughter, Arda Mary, was born August 9. The Wilson's two-year-old son died in 1935.

Cummings—To Mr. and Mrs. Laurence Cummings, Missoula, Mont., a daughter, Lucile, was born December 14. Cummings, '28, is employed by the United States forest service at Missoula.

Schneider—To Mr. and Mrs. Wesley J. Schneider (Florence Kruse, '28), 602 Northeast 69th avenue, Portland, a son, Lawrence, was born December 17.

Sanford—To Mr. and Mrs. Carl Sanford (Gertrude Skow, '28), Chapel Hill, N. C., a daughter was born January 6. Sanford, '28, is an instructor in aeronautical engineering at the University of North Carolina.

Emigh—To Mr. and Mrs. George Emigh (Dorothy White, '34), 626 Franklin St., Astoria, a daughter, Diane Louise, was born January 17. Emigh, '31, is the Astoria high school coach.

Castor—To Mr. and Mrs. Cecil Castor, 8825 Southeast 16th Place, Portland, a daughter, Nancy, was born December 29. Castor, '28, is employed in the circulation department of the Oregon Journal.

Hornecker—To Mr. and Mrs. Roland Hornecker (Ida Berger, '28), Cornelius, a son, John, was born December 16. Hornecker is a member of the '27 class.

Gearhart—To Mr. and Mrs. Dick Gearhart (Lorraine Lonner, '37), 323 North 18th street, Corvallis, a daughter, Barbara Diane, was born January 13. Gearhart is editor of the 1937 Beaver.

Wymer—To Mr. and Mrs. William Wymer (Jessie Burns, '29), Salem, a son, Michael Edward, was born January 11. This is their second son. Wymer, '32, is a state supervisor in the department of vocational education.

Templeton—To Mr. and Mrs. Lawrence Templeton, Chicago, Ill., a son was born recently. Templeton, '27, is instructor in the University of Illinois school of pharmacy located in Chicago.

Aiken—To Mr. and Mrs. Robert Aiken (Catherine Downing, '33), Booth, Or., a son, Robert Neil, was born September 20. Aiken, '30, is an accountant for the Crown-Willamette Paper company.

Kylstra—To Mr. and Mrs. Henry Kylstra (Wilma Dyer, '25), Santa Rosa, Calif., a son, Chester Dyer, was born November 15. They also have a six-year-old daughter. Kylstra, '25, is an engineer with the Pacific Telephone and Telegraph company.

Mealey—To Mr. and Mrs. Robert Mealey, 3395 Southeast Kelly, Portland, a son was born February 2. Mealey, '36, works in the regional office of the U. S. Forest service.

Wood—To Mr. and Mrs. Kenneth Scott Wood (Margaret Nilsen, '32), Medford, a son was born January 1. Wood, '35, is debate coach at Medford high school.

Goodale—To Mr. and Mrs. Harold Goodale, Paso Robles, Calif., a daughter, Marian Joy, was born January 4. Goodale, '22, is manager of the Heyward Lumber company at Paso Robles.

MARRIAGES

Corbin-Coldiron—Nora Coldiron, '35, and Uriel Corbin, '35, were married in January. Corbin is employed by the United States forest service at Cass Lake, Minn.

Griffin-Huntsberger—Elinor Huntsberger of Riverside, Calif., and Z. Wayne Griffin,

'31, were married December 12 in Riverside. Griffin is on the staff of radio station KYA, San Francisco.

Lord-Woodward—Mary Woodward, '22, and William Mason B. Lord, graduate of Bowdoin college, were married in New York December 16. After completing her graduate work at Columbia university Mrs. Lord was employed in the east and lately had been manager of the Brooklyn Woman's club. They are living at Springvale, Me.

Berge-Kinney—Geneva Kinney, '24, and George Berge of Minneapolis, Minn., were married in Portland December 19. Mr. and Mrs. Berge left New York January 7 on the steamship Columbia for Medellin, Colombia, where they are to reside. Mail directed there should be sent to Apartado Arco 689, Medellin.

Thomas-Glantz—Gwen Glantz, '32, and Harold Thomas, '33, were married in Vancouver, Wash., December 24.

Mead-Fruitt—Georgene Fruitt of Brownsville and C. Robert Mead, '36, MS, were married in Corvallis during the holiday season. Mead is a teacher in the Ilwaco (Wash.) high school.

Stinson-Hurd—Ellouise Hurd of Nampa, Idaho, and Richard Stinson, '22, were married in Portland December 27. Stinson is joint owner of an insurance business at 1103 Yeon building, Portland.

Flood-O'Brien—Elizabeth O'Brien of Portland and Gerhard Flood, '29, were married in early January.

Hood-Savage—Brenda Savage, Willamette university graduate, and Gordon Hood, '35, were married in Salem December 26. Their new home is at 423 East Third street, Albany, where Hood has a position with the Resettlement administration.

Schwabe-Orris—Marjorie Helen Orris and William H. Schwabe, '32, were married January 3 in Ontario. Their home is at 1440 Southeast 14th avenue, Portland. Schwabe has an insurance office at 522 Pacific building.

Busch-Eberhard—Dorothy Eberhard, graduate of the University of Oregon, and Jim Busch, '35, were married in LaGrande December 30. They are residing in Klamath Falls in the Audley apartments.

Longtin-Lamberty—Charlotte Lamberty, graduate of Albany college, and David Longtin, '36, were married in Albany in January. Longtin is an instructor in the Drain high school.

Junker-Gribskov—Ella Petersen Gribskov, '24, and Andrew Junker were married at Junction City January 7 and are at Junction City where Mr. Junker is proprietor of the Danish dairy. Mrs. Junker was director of dormitories at the Texas College of Arts and Industries, Kingville, Tex., before returning to her home in Oregon.

Young-Buchanan—Lova Buchanan of Roseburg and Bernard Young, '30, were married January 15 in Eugene. They are at present in Salem while Young takes part in the legislative session as one of the younger members of the house of representatives.

Ross-Soring—Margaret Soring, '34, and Wade J. Ross of Marshfield were married recently. Mrs. Ross is teacher in the Marshfield high school.

Horrocks-Parcell—Ada Parcell, '38, and Rich Horrocks, '36, were married in Portland February 5. The Horrocks will make their home in Portland.

Stockman-Leach—Jane Leach, '33, and Richard Stockman, '33, were married in Pendleton January 1. They are now in Chicago where Stockman is employed by the Dorr company.

Anderson-Balis—Jean Balis of Ashland and Lyle Anderson, '30, were married in Medford January 8. They have taken residence in Medford.

Peterson-Bailey — Lois Bailey, '35, and William Peterson, University of Oregon graduate, were married in Eugene January 22. Their home is in Ontario.

Wagner-Hunter—Mrs. Charlotte Hunter of Island City and Howard Wagner, '04, of Summerville, were married in January at Island City. The Wagners will live at Island City and Wagner will continue in the seed raising business on his farm at Summerville.

Sundby-Martin—Beverly Martin, '38, and Wilfred Sundby, '36, were married in January and are now at their home at 666 Franklin avenue, Astoria. Sundby is meter inspector for the Pacific Power and Light company in Astoria.

Harvey-McKee — Jean McKee, '38, and Charles R. Harvey, '39, were married in Portland January 14. Their address is 1515 Southwest Jefferson, Portland.

Snyder-Hedlund — Alta Hedlund, Oregon Normal school graduate, and James Snyder, '37, were married in Brownsville January 11. They are residing on Snyder's farm east of Brownsville.

Mills-Pickens—Lola Dale Pickens, '37, a J. Brewster Mills were married in Salem December 27. Mills is engaged in business at Cottage Grove.

White-Rudd—Shirley Rudd of Salem and Hudson White, '37, were married during the holidays. White is Smith-Hughes agriculture instructor at Imbler.

Earle-Karst—Genevieve Karst of Salem and Sam Earle, '36, were married in Salem December 28.

DeBernardis-Hulery—Jessie Hulery, '36, and Amo DeBernardis, '36, were married in Portland December 21. Their residence is at 2621 Northwest Raleigh.

Buchanan-Gerardo — Leona Gerardo of Washougal, Wn., and John H. Buchanan, '29, were married in December in Hillsboro. They are living at the Holroyd apartments in Hillsboro.

Sullivan-Gaskins—Eleanor Gaskins, '37, and James Sullivan were married in Vancouver, Wn., January 2. Mrs. Sullivan is completing her college course, then will go to Burns to join Mr. Sullivan.

Whippo-Muller—Margaret Muller, '34, and James Whippo were married recently.

Canova-St. Clair—Jean St. Clair, '33, and Murray Canova, '37, were married in Portland January 9. Their residence is at 1208 Southwest Montgomery, Portland.

Palmberg-Reimers—Lois Reimers, '39, and Walter Palmberg, '36, were married in Portland recently. Palmberg is employed by the Union Oil company.

Miller-Gillespie—Doris Gillespie and Merwin Miller, '35, were married in California January 16. They have taken residence at 1717 Oxford street, Berkeley.

Miller has been employed by the Standard Oil company since completing his work at the Massachusetts Institute of Technology.

Chapman-McLoughlin — Hildred McLoughlin and Jack Chapman, '37, were married January 31. Chapman has a position with the Chevrolet sales agency in Roseburg.

Eisenschmidt-Holland—Alta Holland, '35, and Herbert Eisenschmidt, '34, were married early last summer. In January Eisenschmidt was appointed swimming coach at Oregon State following the resignation of Jack Hewitt.

Saling-Lambert — Eleanor Lambert and Fred Saling, '34, were married September 12 in Seattle, it was announced this month. They are residing at 6129 Southeast Third avenue, Portland. Saling is employed by the Standard Oil company.

DEATHS

Allen—Wilda Richmond, '31, wife of Frank R. Allen of Central Point, died at their home in southern Oregon recently. Her husband and son survive her.

Anderson—Oran Anderson, '31, died January 11 at St. Vincent's hospital in Portland. His parents, three brothers and two sisters survive him.

Mr. Anderson was mill superintendent of the Anglo-American Mining corporation at Randsburg, Calif., before his death.

Peery — Alice Marie Peery, 16-year-old daughter of Wilson K. Peery, '14, and Mrs. Peery, died January 11 in Vancouver, Wn.

The Peerys are residents of Washougal, Wn.

Pierce—Clare Pierce, '12, died December 29 in New York City. Miss Pierce was one of the several daughters of Congressman Walter M. Pierce of Oregon, and sister of Lucile Pierce, '21, now Mrs. Harold F. Hall.

Miss Pierce was an instructor at Columbia university at the time of her death.

Larrowe—A. Eugene Larrowe, '33, died in Portland January 6. He is survived by his widow and son.

Garrison—Gladys Garrison, '24, died recently in Portland. Her parents, two sisters and a brother survive her. Miss Garrison had graduated from the Oregon Normal school following her college work at Oregon State and had then taught in various Oregon schools.

Long—Merle Long, '35, was killed instantly in an automobile accident north of Salem January 8, and his wife, **Dorothy Moore Long**, '34, died the following day from injuries she received in the crash. Their 11-months-old son, Jimmie, survives them as do the parents of both, as well as Mr. Long's sister, Mary Long, '38, and Mrs. Long's sister, Lucille Moore, '27, now Mrs. Gardner Knapp, of Salem.

The Longs had been residents of Salem for the past year where Long had not long ago completed construction of a new station which he had operated since completion.

Since the death of the couple Mr. and Mrs. Knapp have adopted the infant son.

Groves—D. Roy Groves, '07, died in Portland January 30. He is survived by his widow, Mildred Dyer Groves, '08, 2847 Northeast 12th avenue, and by his son Donald.

Groves had been assistant engineer with the United States National Reserves in Portland.

Potts—William J. Potts, freshman in pharmacy, died in Portland January 29 from influenza. His home was in Pekin, Illinois.

Pearson—Roderick Pearson, '16, died February 4 at the Letterman General hospital in San Francisco. He had been in ill health for the past two years though he continued in his work until three months previous to his death. His mother and a brother survive him.

Mr. Pearson entered the service of the United States Bureau of Public Roads in 1918 at Portland, later being stationed at Helena, Mont., and Ogden, Utah. Following the three years spent at Ogden as district bridge engineer he was transferred to the San Francisco office where he was employed until the present.

Gribble—John F. Gribble, '31, was killed February 11 in an airplane crash while practicing flying at Randolph flying field, San Antonio, Tex.

Gribble graduated from the University of Oregon in 1931, after leaving Oregon State, and the following year taught in the high school at Powers. He entered the Randolph flying school in the summer of 1936.

Sanborn—Ruth Miller, '29, wife of Byron Sanborn, died at Twin Bridges, Mont., July 25. She is survived by her husband, a son, 2, and a daughter then 5 weeks old, and by her sister, Mrs. Hutoka Miller Smith, '22, of Portland.

Baker—Waldo J. Baker, '27, died in Portland in February. He is survived by his widow, Mrs. Lillian Dale Baker, and their daughter, Linda. He was a member of Lambda Chi Alpha social fraternity.

Baker had been in Portland taking treatment for an extended illness.

1884

David Glass recently moved from Seattle to 244 Edgewood Road, Redwood City, Calif.

1893

Andrew Shipley has retired from teaching and is now living at Route 1, Sheridan. Shipley withdrew during his first year at Oregon State to begin teaching.

1903

Millicent Mayfield, daughter of **Byram Mayfield**, Enterprise druggist, has transferred to the Oregon State school of pharmacy from the University of Washington.

Rose Chipman Wilcox, retired, and **Laura Chipman** live in Newport where Miss Chipman is engaged in selling real estate.

1906

Robert Jackson, who has a position in Berkeley, Calif., was a visitor in Portland and Corvallis in January.

1911

The heat control device invented by **Charles Armstrong**, engineer of the Armstrong Heat Control corporation of Portland, has saved 20 to 40 per cent in the steam bills of the various larger office buildings and hotels of Portland and Seattle where the machines have been installed. Six of the new machines have been contracted for the new Oregon state capitol building, being particularly specified by the New York architect. All stock in the corporation manufacturing these machines is owned by Corvallis residents.

An electric thermostatic control invented by Armstrong to automatically raise and lower ventilators in greenhouses has proved satisfactory in its five years of use in Albany greenhouses and is now being placed on the market.

Albert Asbahr, Portland attorney, has moved his offices to the Mead building.

1912

To Wearers of the Winged T:

This letter is to remind you that twenty-four years and eight months have flitted away (or do you want to be reminded?) since you signed a personal note for ten dollars to finish paying for the best annual published by any class before or since the class of '12. I know that is true because I wiped the dust off of mine today and, after reading it again, concluded that it was well worth the price although it did represent quite a sacrifice at the time.

This brings us to the point: We are celebrating our Silver Jubilee in June. Won't you begin planning, right now, to give yourself the treat of your life by coming to the big celebration? Remember, if you don't come you are not only cheating yourself but the rest of the class, so let's make this a 100 per cent affair. Farm the kids out, if you can't bring them along; they will survive and you will have a better time if you're not encumbered too much. Even those insignificant '11s appeared to thoroughly enjoy every minute of their celebration last year. We must not be outdone by them, and it is necessary to set a high mark for those ignominious hair-cutting '13s to strive to equal next year.

Let us make this affair truly a gathering together from the four corners of the earth. Following George Scott's suggestion, in the January Oregon State Monthly, correspondence with post cards will not be a burden and the method gets results. Begin talking up the reunion by corresponding with your old cronies now; don't delay, because some will require a little time to build up their enthusiasm. Let's get **Alice Pimm Clark** from Japan, **Jimmie Mann**, **Allan Burdick**, and **Genevieve Tillery Williams** from Hawaii, **Otto George** from Germany, **Alfred and Bella Ackerman Lunn** from Massachusetts, **Clarke Schultz** from New York, **Harry Belknap** from Pittsburgh, **Walter Morris** from Punxsutawney, **Hugh and Hortense Eppley Smith** from Atlanta, **Jay Green** from St. Louis, **Sid Boddinghouse** from Chicago, **"Frenchy" Boulton** from Boise, and all of the others wherever they may be found.

Eleven of us here in Corvallis are trying to keep the home fires burning, and within a week expect to have a meeting for the purpose of putting more logs on the fire and to organize for the big event in June. Send us your ideas and suggestions and let us have the good news just as soon as you find that you can come. Remember the dates are May 28 to 30.

Yours for a real reunion,
FRED McMILLAN

Otto Sitton, Carlton farmer, was elected president of the Farmers Co-operative creamery at Carlton recently. One of the directors of the same group is Frederick Jernstedt, '13, Yamhill.

A friend of Frank Boulan, listed among the unknowns of the 1912 class, notified the Alumni office that Christmas greetings came from him, giving his address as 1318 Franklin street, Boise, Idaho.

1913

Captain George W. Morris, with the Signal Corps at the Boston base, writes that he has many times desired to return to the campus for a visit but his duties always seemed to carry him to most distant places where it was not convenient to leave.

Captain Morris married Catherine Connell in 1919 and they now have a daughter and a son. Their home is at 54 Egmont street, Brookline, Mass.

Laurence McBride and Amber Spaulding McBride are living at 705 M avenue, La-Grande. McBride is employed by the federal government.

1914

Otis Patterson is office engineer for the Right-of-Way department of the Washington State Highway commission, Olympia, according to Harold Patterson, '25, a Canyon City resident.

Henry Odeen, Iva McGinnis Odeen, '11, and their family have located at 923 Wilde avenue, Drexel Hills, Philadelphia, since Mr. Odeen's transfer to eastern territory by the Filtrol Oil company. The Odeens have been Glendale (Calif.) residents for several years.

1915

Lystra Tagg and her husband, W. L. Horris, live at 5103 Southeast 64th avenue, Portland.

Hartzel Crosby and Mrs. Crosby, Mayme Lance, '14, of Mansfield, Wn., and their family were in Corvallis during the Christmas vacation. Two of the Crosby children are now students at Washington State college.

Leland Corl and Wilbur Shelton, '20, of Corl's Book store, Corvallis, recently purchased the Boone Book store in Albany. Corl will have charge of the Albany store for the present.

C. Edwin Hill, state co-ordinator for the soil conservation service in Oregon and a resident of Pendleton, spent several days on the Oregon State campus during January.

Leora Philippi, now Mrs. Chaney, is teaching her first term in the high school at Corbett.

John Kelly operates the Kelly Drug company at Cottage Grove. His son is a student at Oregon State this term.

1916

Emanuel Reichart, New York lawyer, has his residence at 81 Hillside avenue, New Rochelle, N. Y. His family now includes a girl, 11, a boy, 6, and a girl, 2.

Merrill Evans, representative of W. J. Lindenberger, Inc., of Los Angeles, called at the Alumni Office recently. Evans, a graduate of Cornell before attending Oregon State, was on the campus a number of years with the extension department.

The Evans, residents of Alhambra, Calif., have a boy aged 7 and a girl 10.

Carl Evans holds the position of Western states factory representative for the truck department of the Ford Motor company with his offices in Seattle.

He and his wife and family of two children live at Route 1, Box 114, Bellevue, Wn.

1918

Fred Curry recently purchased the Kell Drug store at 3646 Southeast Hawthorne, Portland, and is now operating it under the name of the Bagdad pharmacy. Curry also owns the Curry pharmacy at 3869 Southeast Hawthorne.

Bertha Whillock Stutz, associate professor of secretarial science at Oregon State, will be among the 60 visiting educators who will serve as guest instructors at the summer session of the University of Southern California.

Albert Scoth recently became national traveling secretary for Sigma Alpha Epsilon.

National headquarters of the fraternity are at Evanston, Ill. Scoth had been a member of the faculty of Kansas State college, Manhattan, for a number of years.

Dr. Francois A. Gilfillan, professor in the school of pharmacy, has just been appointed a member of the interinstitutional curriculum committee by Chancellor Hunter.

1919

Aubrey Ostrander and Rae Partin Ostrander, '18, live at 7044 17th avenue, Southeast, Seattle. Ostrander is employed by the Union Pacific system.

1920

Dr. Edmund H. Padden, husband of Ruth Steele, is flight surgeon for the United Air Lines and for the Pan American Airways. His offices are in Oakland, Calif.

Deirdre Carnes, now Mrs. J. Wayne Williams, lives at 1304 Southeast 44th avenue, Portland.

1922

Lowell Stockman, one of the directors of the Oregon State Alumni association, and a Helix wheat rancher, took time off when farm duties were fewer to come to Corvallis and to the coast to fish. He reported a satisfactory catch of steelheads.

John Bushman has a flour and feed retail business at Eugene where his address is 1959 Onyx.

John Balbach has been advanced to the position of assistant manager of the Portland district of the Metropolitan Life Insurance company. Balbach has been with the agency since March, 1933, and has been one of its leading producers.

1923

A letter received from Helen Griffie Goodale, '26, and Ralph Goodale, '23, residents of Pomona, Calif., gives a good account of a number of Oregon Staters; we know you will enjoy it as much as we did:

"When Percy Melis, '24, visited Los Angeles recently to see his oldest daughter who is in school there, Kappa Delta Rho gave a dinner in his honor. Attending also were Alpha Pi Deltas, that is, those who never joined the national, and friends of 'Peck's.' They say it was the grandest reunion in a great many years. Some of the men had not seen each other for ten years.

"The dinner was Tuesday evening, January 26, at Hotel Rosslyn, Los Angeles. Members present and their occupations:

"Percy Melis is with the U. S. Forest service in Missoula, Mont. He has three daughters.

"Arthur J. Johnston, '25, is with the Totalizer company whose equipment is at the Arcadia race track. Art invented the totalizer which adds the wagers and quotes the odds as they are placed by the public. This invention has revolutionized the calculating of wagers at race tracks. He is now working on a new electrical invention. Johnston has a wife and two daughters.

"Edgar Kenyon, '24, is living in Los Angeles and is doing hydraulic engineering with the Los Angeles County flood control. He and Ann McPherson Kenyon, '24, have one son.

"Fay Gillette, '21, living in South Pasadena, is with the extension department of the State of California, helping the agricultural interests solve their problems. He has a wife, two daughters and a son.

"Kenneth Goodale, '25, is a teller in the Bank of California at Fullerton. He has a wife.

"Maurice Stokesbary, '25, is research director for the Alhambra (Calif.) high school. He and Helen Daigh Stokesbary, '27, have one daughter.

"Henry Dolton, '24, with the athletic department of Central Junior high, Los Angeles, has a wife and two children.

"Elwood Pickering, '24, is agricultural instructor in the Audubon school in Los Angeles. He has a wife and daughter.

"Lester Matthews, '25, teaches in the Fremont high school in Los Angeles. He and his wife and daughter live in the same city.

"George Smartt, '27, Mildred Newton Smartt, '27, and their daughter live in Al-

hambra where Smartt teaches in one of the city schools.

"Monroe Smartt, '28, is an instructor in the Los Angeles junior college. He and his wife and son live in Hollywood.

"Val Noonan, '23, is a physical education instructor in the Central junior high school, Los Angeles. He lives in La Cresenta with his wife, two sons and daughter.

"Norman Noonan, '23, is instructor in the Mount Vernon junior high in Los Angeles. His family includes a wife, son and daughter.

"Raymond Hixson, '24, Ruth Gressley Hixson, '25, and their daughter live in Huntington Park. Hixson is agent for the New York Life Insurance company."

Mrs. Goodale continued with this general news:

"Saw Bertha Reeder Moore, '23, the other day. This summer the Moores bought a new house in Fullerton and have furnished it in the modern, or should I say modernistic manner? Her husband, Harold Moore, has an ice cream business. Bertha this year resigned her teaching position in the Fullerton high school but is occupying her spare time very pleasantly and profitably working for the Anaheim Electric company, making service calls to demonstrate electric ranges.

"Helen Marburger (Mrs. Herbert Johnson) and daughter are living at 129 South Ohio street, Anaheim, for the present. Helen's husband is a mining engineer who has a new position with an American gold-mining company in the Philippines. He left for Manila December 21. Helen will join him if and when he can find living quarters for the family. The mine is at an elevation of 5,000 feet and no houses are provided by the company."

Harold Lance is a drug clerk in Peery's Pharmacy, Oregon City.

Verne McKinney was awarded first place cup at the annual Press Conference in Eugene for the best weekly newspaper in Oregon. This is the second time he has won the trophy.

McKinney's advertising manager is Ed Coman, '31.

Helen Snyder, her husband, Chester Zumwalt, and their two daughters are living at 627 North Winter street, Salem.

While Sara Huntington Wertz, home demonstration agent for Deschutes county, was attending the Home Interests conference in Corvallis this month she received a telegram from Bend stating that the county court house had burned. All her records and equipment were destroyed.

Sonia Wilderman notified us that she became Mrs. W. F. Nielsen last December 25, and lives at 1056 Pomona avenue, Albany, Calif. Mrs. Nielsen was librarian at the California Experiment station, Berkeley, from 1933 to 1936.

Almon Wiest has been transferred from the Portland to the San Francisco office of the Shell Oil company. He and his wife, Gertrude Isensee, '29, live at 545 Dewey street, San Francisco.

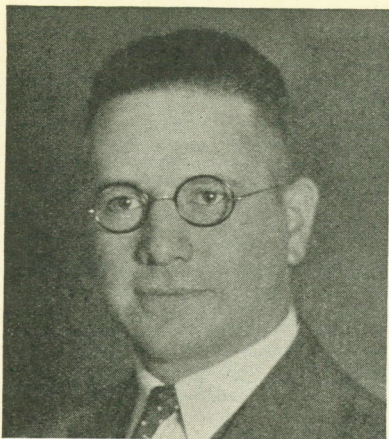
Dorothy Ostrander is now Mrs. Leonard Leach, housewife at 1214 East 98th, Seattle. Mrs. Leach graduated from the University of Oregon after leaving Oregon State.

1924

A letter from Allegra McGreal, now Mrs. Larry Allen, states that she and Larry, '27, and daughter Mary are happily situated in San Francisco. Allen is director of the artist's bureau for the National Broadcasting company.

The Allens often see Lindsey Spight and Ruth Stephenson Spight, '25s; Jack Bowman, '28; Vivian Tohl Bowman, '27; Lewis West, '27, and Fay Wassam West, '30, all bay region residents.

Calvin Cooper, now supervisor of installations for the Portland office of the General Electric company, was on the campus in January to get special equipment tested in the engineering laboratories.



J. HARRISON BELKNAP, '12, has been named manager of the technical employment and training work of the Westinghouse Electric and Manufacturing company at Wilksburg, Pa.

NOT NEW BUT INTERESTING

These folks were well known on the campus. Perhaps you haven't checked on them recently so here is the information.

Robert Theiring, '25, has a general insurance agency in the Hall building, Marshfield. He and **Agnes Hesseldenz Theiring** have one daughter.

Charles Fox, '27, is in the same town—he manages the large Marshfield plant of the International Cedar corporation.

Chester Hubbard, '30, is a partner in Hubbard Brothers, Inc., Medford hardware store.

Dale Cowen, '33, and **Bill Johnson**, '30, and **Chet Noonan**, '26, are employed in the offices of Norris, Beggs and Base, Portland realtors.

Arthur Fertig, '17, manages the feed department of the Lower Columbia River Dairy Cooperative association at Astoria.

Harold Turlay, '13, is in charge of the affairs of the Uptegrove Lumber company at Astoria. His wife is **Florence Starbird Turlay**, '12.

Leo Hollenberg, '18, has been superintendent of schools at Nyssa, Eastern Oregon, for a number of years.

Peter Cosovich, '22, owns a book and stationery store in Astoria.

NEW LIFE MEMBERS OF THE ASSOCIATION

Frances Benson, '23, now Mrs. Thomas Roeser, Corvallis, Or.

Helen Snyder, '23, now Mrs. Chester Zumwalt, Salem, Or.

Chester D. Lafferty, '12, Portland, Or.

Velma Shattuck, '27, now Mrs. Floyd Mullen, Albany, Or.

George L. Harper, '11, Chicago, Ill.



Barbara Stanwyck

in
Dean O'Casey's
The

'Plough and the Stars'
... with **Preston Foster**, Una
O'Conner and the **Abbey**
Theatre Players.

1925

George Hessler, who has been with the New York Life Insurance company since 1925, is cashier of the Olympic branch of the company in Seattle.

Wittmer MacDonald was on the campus in late January. He is assistant chemist in the State Pure Food and Drug department, Salem.

Tom Wallace is engaged as a research engineer for the Los Angeles Gas and Electric corporation. His mailing address is 3281 Romulus Drive, Los Angeles.

Millard Murray and **Elizabeth Roberts Murray** live at 2940 Northeast 31st avenue, Portland. Murray is manager of the paint department for the Marshall-Wells Hardware company.

1926

Marjorie Anderson is now Mrs. O. C. Gill, housewife at Grandview, Wn.

Philip Faucett is chemist for the National City Turpentine company in Los Angeles. He and Mrs. Faucett live at 3462 University avenue.

William Geiberger works at Young's Market, San Diego, as accountant. He and **Elizabeth Pollock Geiberger**, '29, live at Route 1, Box 1349, La Mesa, Calif.

Ernest Haevernick supervises sanitation for Yamhill county. His home is at 316 Tenth street, McMinnville.

Thelma Gannaway and her husband, **Arthur Render**, live at 24 North Bartlett, Medford. Her husband is owner of the Render Tea and Coffee company there.

Gertrude Johnson is home economist for the Idaho Power company in Boise. Her residence is at 1932 North 18th street.

Arthur Sliffe is in Salem now, employed by the Charles Spaulding Logging company. He and Mrs. Sliffe (**Mabel V. Johnson**, '26) and their 16-months-old daughter, **Loree Eleanor**, live at 2265 Maple avenue.

Paul Dean, who went to the General Electric company in 1926 as a student engineer, has advanced at the Schenectady plant to an engineering position in the electric refrigerator department. He lives at 220 Second street, Scotia, N. Y.

Dalmer Reeder is owner of a men's furnishing store in Klamath Falls. His home is in the Roosevelt apartments.

Stanley Bowman returned to San Jose, Calif., after graduation and is now an automobile dealer there at 499 South 12th.

Franklin Brown is still farming at Newark, Calif. He has been there since 1926.

Russell Dentel, **Ethel Cowgill Dentel** and their family are living on a farm at Route 2, Silvertown.

Bernard Davis is an auditor for Oregon's secretary of state. His mailing address is 1515 Southwest 11th avenue, Portland.

Earl Davis, entomologist, lives at the Evergreen apartments, Bozeman, Mont.

Cecil Griggs and **Isobel Robertson Griggs**, '27, and their family moved to Eugene last year where Griggs became field man for the Eugene Farmers' creamery. Their address is 443 East 12th street.

Richard Young, who had been stationed with the U. S. Engineers at Owyhee dam for a number of years, has been transferred to Antioch, Calif. His street address is 805 H street.

Richard Durant is assistant divisional engineer for the Bureau of Reclamation at the All-American canal at Yuma, Ariz. His Yuma address is 397 Fourth street.

Sedoris Jordan, now Mrs. Thaxter Daniels of San Jose, Calif., noted that she often sees **Hazel Ballif**, '26, now Mrs. John Beale of San Francisco. Mrs. Beale is secretary to the superintendent of the Marine hospital.

Mr. ('25) and Mrs. Daniels and their son were in Oregon in July for a short visit. Daniels is an instructor in the high school at San Jose.

Sidney Reichart, who lives at 36 Harvard, Pawtucket, R. I., has been an instructor at the Rhode Island School of Design at Providence for ten years.

Reichart is married and has two children.

Fred Burya, draftsman for the Resettlement administration, and **Ada Hawley Burya**, '25, have located in Portland at 1307 Northwest Taylor.

Dr. Stanley Ford and **Pearl Horning Ford**, '30, and their young daughter and son live at Glenside avenue, Carrcroft, Wilmington, Del. Dr. Ford is a research chemist for the DuPont company.

1927

Dr. DeForest Palmiter started February 1 in his new position as associate in research in the division of plant pathology of the New York (Geneva) experiment station. He is stationed at the Hudson Valley Fruit Investigations laboratory located on the Vassar campus. Before moving to New York he was research associate in plant pathology at the University of Wisconsin.

Captain Orville Rice is with CCC Company 2584, Camp SCS-8, Beverly, W. Va.

Charlotte Thayer and her husband, **Howard C. Woster**, live at Route 6, Box 151-A, Tacoma, Wn.

Harry Wilbert, engineer with the Bureau of Reclamation, Coulee Dam, Wn., visited his campus friends in January. Wilbert accounted for **Francis Thomas**, another classmate—he is office engineer for the Bureau of Reclamation at Caballo, Texas, where a new dam is being constructed. Wilbert reported that **Fred Pohl**, '29, is also at Coulee Dam.

Arlin Blain has an electrical appliance business in Huntington Park, Calif. His address there is 6730 Pacific boulevard.

Robert McIlvenna is now the Reverend McIlvenna and his address is 6415 Northeast Tenth avenue, Portland.

1928

Greetus Bond keeps himself busy as a salesman for the Shell Oil company in Eugene and on the side operates a handle factory at 1034 West Fourth avenue.

Donald Beith has returned to Joseph with his wife and two boys to engage in the poultry business.

Since leaving Oregon State **Karl Dyrud** has graduated from dental college and now has a dental practice in Klamath Falls.

Marian Van Scoyoc, now Mrs. E. R. Ham, became head of the department of home economics of the San Francisco Chronicle recently and is known under the name of "Jane Friendly."

James Thayer is still with the crops department at Michigan State college, according to a note from him recently.

The Thayers (**Florence Reed**, '30) now have a family of three—a daughter and two sons.

Lloyd Shriner is a member of the Oswego police department.

Theodore Wetzel and his wife, **Mabel Johnson**, '31, live at 2219 North 47th street, Milwaukee, Wis.

Katherine Lindley and her husband, **Frank Beeton**, live at 1466 Bellevue avenue, Burlingame, Calif. Mrs. Beeton spends part of her time as a commercial short story writer.

1929

Dr. Ernest C. Miller, who graduated from the University of Oregon medical school in 1935, is a member of the Salem Clinic located in the First National Bank building, Salem.

Robert Kerr has removed his law offices from room 328 of the American Bank building, Portland, to suite 831 in the same building.

Nathan Young, who was employed on the Owyhee project at Nyssa for several years, has a civil engineering position at Antioch, Calif., and lives there at 518 Peters court. His brother, **Richard**, '26, is employed in the same town.

Truman Gadwa, now a chemist living at 264 West 12th street, New York city, graduated from Massachusetts Institute of Technology in 1936.

Noland Turner is employed as a clerk in the office of the Washington State Traffic department at Olympia and lives there at 2119 Washington street.

William Crowston is a state inspector stationed at Hornbrook, Calif.

Virginia Laughlin, now Mrs. Donald Smith-peter, lives at 2339 East street, Baker.

Jack Meyer keeps the accounts of the Stadelman Ice company at The Dalles.

Justin Peck manages the Safeway store at Enterprise.

Henry Becker, traveling auditor for the State Relief commission, has headquarters in the Spalding building, Portland. His residence address in Portland is 3745 Southeast 10th avenue.

Word from the parent of Lola Titus states that Miss Titus died in December, 1935.

Frank Kahl is at Judith Gap, Mont., as roadmaster for the Great Northern Railway.

Burrell Mitchell and Myrtle Johnson Mitchell, '31, are living at 413 Ninth avenue, Haddon Heights, N. J. Mitchell is an engineer with the RCA-Victor Manufacturing company.

Verne Gooley is owner and manager of Young's Gown shop, Portland. His wife is Frances Smith, '28.

Mrs. Minnie Frick, associate professor of secretarial science at Oregon State and author of several Gregg shorthand methods books, will teach again at the summer session of the University of Southern California. Mrs. Frick will be one of the 60 visiting educators for the session.

George Bertram is chief of the soils laboratory at the government dam being built at Tucumcari, N. M.

Pat Chambers is owner of a sign shop in Portland, 521 Southwest 11th avenue, making signs on cloth, metal and wood and specializing in gold and silver leaf lettering.

George Adams is a food broker in the San Francisco office of W. J. Lindenberger, Inc., 16 California street.

Mrs. Adams was Jessie Taylor, '30.

1930

Charles Hoffman went to Washington, D. C., in January to take a position in the division of farm population and farm life, bureau of agricultural economics. Hoffman has been employed on the Oregon State campus for the past year.

Elva Willey, now Mrs. Carl Warner Roberts, is a homemaker living at 4812 Southeast 43rd avenue, Portland.

Bernis Grow and her husband, Harvey Stoddard, are living at Houlton, near St. Helens.

Walter Olson and his wife were campus visitors in January, coming from Twin Falls, Idaho. Olson and his father have a large irrigated ranch near Twin Falls and have specialized in potato raising.

Three members of the '30 class taking new teaching positions are Marvin Schepman, as principal of the high school at Grass Valley, Galena Sandwick at McLoughlin high school, Milton, and Florence Trapp at Huntington.

Mildred Elrod has been appointed home economist for the Northwest Electric company, Portland, succeeding Mrs. Louise Espey. Miss Elrod has been teaching in the high school at Whitefish, Mont.

1931

Don Lindsay and Helen McWilliams Lindsay, '34, have located in San Francisco where Lindsay has a position with the Otis Elevator company. Since graduation Lindsay has been an officer in various Oregon CCC camps.

Norman Oliphant, Mary Elizabeth Trullinger Oliphant, '29, and their family recently moved from Portland to 8707 Fauntleroy, Seattle.

Roy Dahlin, first lieutenant in the U. S. Army, is camp commander at Camp Moro, SCS-4, Moro.

Emma Kleinsmith is assistant junior civil service examiner in Washington, D. C. Her mailing address there is 1301 Massachusetts avenue, Northwest.

W. Arthur Sawyer, assistant farm agent in Umatilla county, is the newly appointed and first county agent for Harney county. His headquarters are at Burns.

Mrs. Sawyer was Rosina Gallatin, '29.

Eugene Allen has a California territory to cover for Eli Lilly and company, with headquarters in Chico. His address is 4220 Sacramento avenue.

Axel Lindh, with the U. S. Forest service at Rhinelander, Wis., was a visitor in the state of Washington in January.

Grace Smith this year is teaching in the Henley high school, Route 2, Klamath Falls.

Harold Bowerman, Alice O'Neil Bowerman, '29, and their daughter are living at 912 Harvard, Roseburg. Bowerman has a position in the forest service office there.

Bowerman was injured in an automobile accident but has recovered satisfactorily.

A member of the class graduating from

the Medical Department Professional Service Schools on December 23 was Dr. Raymond Duke. Dr. Duke has been in Washington, D. C., as a post graduate at Walter Reed General hospital.

1932

Susannah Goodwin does case work for relief registered at the University of Oregon extension service in Portland. Her mailing address is 2254 Northwest Glisan.

Edgar Parker this term is a half-time instructor in forestry at Oregon State college, replacing Anthony Thometz, '36, who has taken a forest service position.

Joe Deremiah, formerly assistant secretary of the Marion county association, recently accepted a position with the Resettlement administration at Medford.

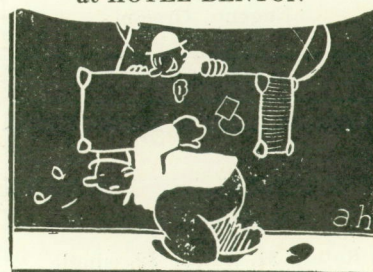
Mrs. Deremiah was Imogene Hocken, '30.

The engagement of Lauramahlea Rowley of Portland and Robert Burk was announced recently. The wedding is to take place April 10.

Mary Kniefel is the wife of Dr. J. Moore, 1919 Burwell, Bremerton, Wn.

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Florence Merryman and her husband, Philip Lewis, have located at Federico Lacroze 2985, Colegiales, Buenos Aires, Argentina. They were married in November.

Kenneth Chapman recently located in Astoria as a druggist in the Hellberg Drug company. He had been employed in Shelton, Wn.

Tom Bruce has located at Colfax, Wn., where he is an insurance representative.

Merle Lowden is the new ranger in the Siskiyou national forest whose headquarters are at Gasquet, Calif. Lowden's mail should be sent to O'Brien, Or.

1933

Owen Davis is at Florence where he is a landscape architect with the State Park commission.

Karl Peterson holds the position of educational adviser at Camp 2114, CCC, Moro. Mrs. Peterson (Emmajean Stephens, '33), is acting head of the home economics department at the University of Oregon.

Ralph Curtis, landscape architect with the National Park service, and Valette Harer Curtis, '31, and their year-old son are living at Route 4, Box 588, Tucson, Ariz.

Brinley Williams has a position in the Economy Drug store, 205 Exchange avenue, Santa Rosa, Calif.

Ray Parrish recently bought the College Pharmacy at Newberg.

The engagement of Amy Aldrich and John Bedford was announced in Pendleton during the Christmas vacation. The wedding date has not been announced.

Carl Myers holds the position of deputy sheriff at Condon.

Owen Davis, landscape architect, has been stationed at Florence (P. O. Box 341) by the State Park commission.

1934

Joe Lammi has returned to Oregon State to complete work for a master's degree in forestry. His address is 2735 Jackson street. Lammi was stationed in Lakeview by the U. S. forest service.

Jack Houser has a service garage at North Bonneville, Wash.

Wallace Ayres is assistant in the food brokerage business of W. J. Lindenger in Los Angeles, there working under M. O. Evans, '16.

1935

Arthur Kodani, foreign trade merchant at 1126 El Centro, South Pasadena, Calif., is residing temporarily in Japan.

Forrest Lindsay heads the physical education department at San Dieguito union high school, Encinitas, Calif.

Kenneth McLeod, chemist for the Oregon Mineral survey, lives at 210 Kings Road, Corvallis.

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Peter Padgett holds the position of chemist with the Crown-Willamette Power company at West Linn. His home is at 602 Center street, Oregon City.

In the same city Edward Parker is testing pulp and Neal Troeh testing paper for the Hawley Pulp and Paper company. Parker's address is 22 Northeast Fremont, Portland, and Troeh's is 6305 North Williams avenue, Portland.

Morris Smith sells products for the H. J. Heinz company. His Portland address is 2181 Northwest Glisan.

Frances Struble, 104 Northwest 20th avenue, Portland, assists in the circulation department of the Portland Public library.

Herbert Swenson is junior scientific aide in the testing laboratory of the U. S. Engineers, Bonneville. His mail should be sent to 1133 Southeast 49th avenue, Portland.

William Taylor is a machinist for the Iron Fireman Manufacturing company in Portland and lives at 3145 Northeast 46th avenue.

Marvin Ufford is engaged in farming at Route 4, Albany.

Daphne Wyman is in Prairie City this year teaching girls' physical education and as head of the commercial department in the high school.

James Mershon works with a surveying crew of the state highway department at Dayville.

Preston Adkins, 1104 West 9th street, Albany, is an electrical engineer employed by the Mountain States Power company.

Martin Broadbooks has a teaching fellowship in the chemistry department at the University of Washington where he is working for his doctor's degree. His Seattle address is 4537 11th avenue, Northeast.

Howard Eberhart is an instructor in engineering at the University of California. His address in Berkeley is 2456 Webster street.

Barbara Graham is now Mrs. Everett Cottrell, housewife at 618 Court street, Woodland, Calif. Her husband is taking post graduate work in animal husbandry at the University of California, Davis branch.

Arden Grasier is on a state highway department project at Klamath Falls and lives at 1195 Fifth street there.

William Grenfell operates the state short wave radio station at LaGrande. He resides at 1601 Washington street.

Clarence Guderian teaches machine shop in Salem Senior high school. His mail should be directed to Route 1, Box 34-D.

Valerie Bolton has entered St. Vincent's hospital, Portland, for training as a clinical technician. Miss Bolton's address is 2509 Northwest Lovejoy.

Louise Crillo, now Mrs. Harwood, came to the Oregon State campus in January to accept a position on the home economics extension staff. Mrs. Harwood had been teaching foods and nutrition and managing the cafeteria at the Parrish junior high school, Salem.

Letha Smith (Mrs. Maurice I. Smith) is now residing in Seattle—at 2714 King street. Charles Strachan, MS, is at Summerlands, B. C., as biological chemist for the Dominion Government experimental station.

Ted Townes is employed by the American Smelting and Refining company at Selby, Calif. His work concerns the refining of Chinese silver.

1936

Morgan Gallaher is employed at the Grand Coulee dam, Coulee Dam, Wn.

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William Dorner inspects bridges for the Oregon State highway bridge department. He lives at 660 North High street, Salem.

Robert Edson is employed as a draftsman by McCulloch & Sons, Portland. His home is at 3143 Northeast 43rd avenue.

Elizabeth Chase is now Mrs. Frank A. Horton and lives at 3819 South Flower Drive, Los Angeles. Her husband is a Los Angeles dentist.

Dr. Paul Frey has returned to Colorado to teach at Fort Collins. His address there is 724 Smith street.

Mrs. Alice Fisher recently became house-mother at the Multnomah County Hospital Nurses' home, Portland.

Herbert Etchegaray began training not long ago as a student livestock buyer for Armour and Company in Los Angeles. His mailing address is 2070 West 70th street.

Albert Davies, employed in the Mount Hood National forest, Parkdale, is touring California in his vacation time.

Charles Edelson is attending the University of Oregon Medical school, Portland, and is living in that city at 2530 Northeast Thompson.

James Denyer is doing his year of drug work in the Gladstone Pharmacy, Gladstone, prior to registration with the state.

George Ferguson is studying this year at the University of California. His temporary address is 1802 LeRoy avenue, Berkeley.

Ardis DeArmond Amrine and Richard Amrine have located at 202 Riverview apartments, Oregon City.

Janet Collie is an intern dietitian at the Alameda County hospital, 2701 14th avenue, Oakland, Calif. Rhoda Cougill, another student dietitian, is studying at Harborview hall, Seattle.

Leverett Davis is instructing and doing post graduate work in the physics department, California Institute of Technology, Pasadena, Calif.

Ray DeLancey inspects bridges for the Bridge department of the Oregon State Highway commission. His headquarters are in the State Office building, Salem.

Sherman Feiss is making timber sales for the U. S. Forest service at Seneca.

Leland Fryer is stationed in McMinnville, employed by the Resettlement administration. His home is at 1020 Brooks street.

Leonard Fuller is a graduate student in mechanical engineering at Stanford university this term. His Palo Alto address is 1535 Cowper.

Harold Gustafson is junior forester at the Zigzag station of the U. S. forest service.

Irene Guy holds the position of secretary to the editor of the Oregon Journal, Portland.

She resides at 1811 Northwest Couch at the Tudor Arms.

Richard Hammond is employed as a chemist by the Glidden Paint company, San Francisco. Mail to him there should be directed to 2323 Franklin street.

Randolph Nichols works with the U. S. Engineers, Portland. He resides at 1925 Southeast Vista avenue.

Reverend William Osgood, MS, went to India after receiving his degree to become a missionary at Hatigarh, Orissa, India.

Lloyd Powell bought and is farming his 500-acre ranch at Tyee, west of Oakland, Or.

Ruth Reed, intern dietitian at Johns-Hopkins hospital, receives her mail at 600 North Broadway, Baltimore, Md.

Lucile Sibley, now Mrs. Hubert J. Steele, is the stenographer in the chemistry department at Oregon State. She and her husband live at 1463 Western avenue.

Elbert Smith, 206 1/2 Hayward, Ames, Iowa, is graduate assistant in chemistry at Iowa State college.

Glenn Spath is a pharmacist at the Graham Drug company, Seaside.

Marian Spinning completed her nurse's training and public health nursing courses and is now nurse in the surgery at St. Vincent's hospital, Portland. Her mailing address is 1715 Northeast 45th avenue.

Bernard Stain, graduate student at New York university, is living at 149 West 12th street, Apartment 6-1, New York City.

John Strom is on the sales force of the Puget Sound Machinery Depot, Seattle, Wn.

Gail Thomas is at the U. S. Forest service headquarters at Jackson, Wyo., and Anthony Thometz is a junior forester at Cleveland, Tenn.

Sybil Jenkyns teaches food and clothing in the Roosevelt junior high school, San Diego, Calif., and lives at 506 Palm street.

Louis Javete is assistant ranger, U. S. Forest Service, Butte Falls.

Bernyce Jones works in the commercial department of the Pacific Telephone and Telegraph company, Portland, as service representative. Her home is at 8225 Southeast Taylor.



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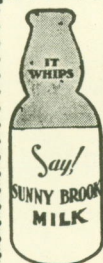
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FOR FEBRUARY, 1937

CHEMISTRY

(Continued from Page 114)

newer dyes that are now being made in enormous quantities.

There are some one hundred twenty different kinds of glass, although to the average individual a piece of glass is just a piece of glass. He should be able to appreciate plate glass, or rolled glass, and its manufacture, crystal glass, chemical glass, thermometer glass, common window glass, and even water glass. He should be able to appreciate the ceramics problems and understand what effect high temperatures have upon the different glazes, as well as to understand the best kind of materials that should be added to form the glazes on ceramic utensils.

He should understand how minerals are leached from the matrix and deposited in seams and often in large beds. The great salt mines, both above ground and below, should give him no particular trouble to understand, and particularly why the salt

beds are composed of layers of different kinds of salts.

He should appreciate what is meant by "dry ice" and the modern methods of refrigeration in which volatile liquids are allowed to expand to remove the heat on expansion in the cooling chambers, and therefore cause refrigeration.

He should know enough about biochemistry to understand the action of enzymes of foods. He should also appreciate the term "corrosion," particularly with reference to the atmospheric influence on metals, and also pigments and their protective effects.

For most of these processes and their development and perfection, the chemist is responsible, and it is to him that we must look for the development of the industries above named.

It is evident from what has been mentioned that even aside from the practical applications, a cultural course in chemistry is greatly to be desired, as without it, he is completely at a loss to appreciate what has been done for him.

NEWS AND COMMENT

(Continued from Page 105)

The club room is sufficiently large to accommodate a meeting of 40 or 50 people, so all Oregon State groups are urged to take advantage of this room and use it as often as necessary. In order to avoid conflicts with meetings, please call Allan Rinehart and schedule your respective meetings in advance.

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