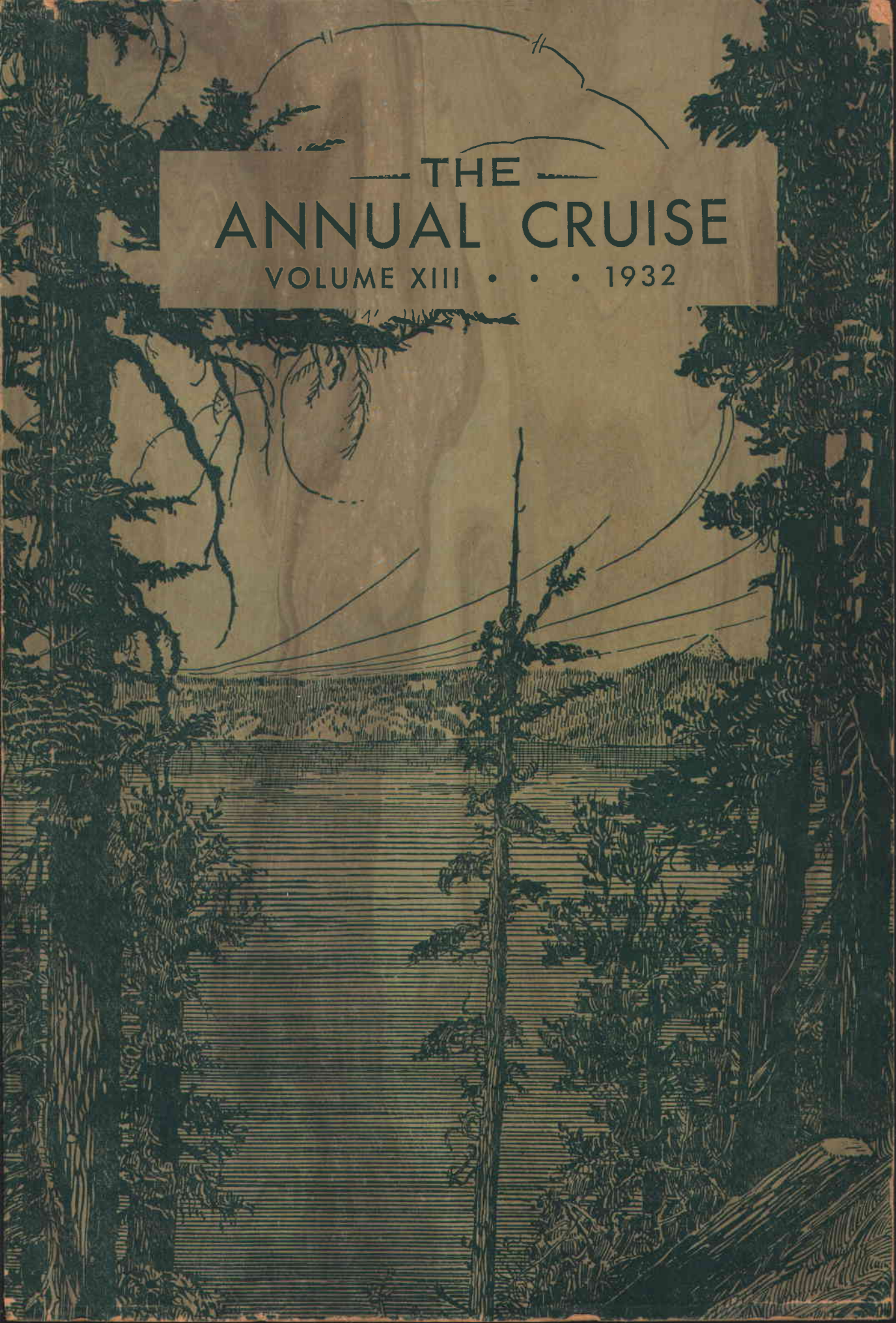

THE ANNUAL CRUISE

VOLUME XIII • • • 1932

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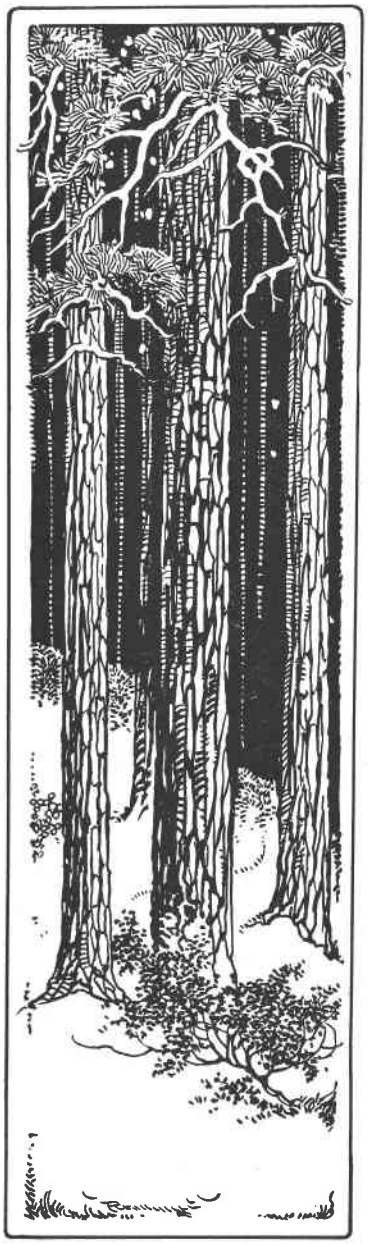

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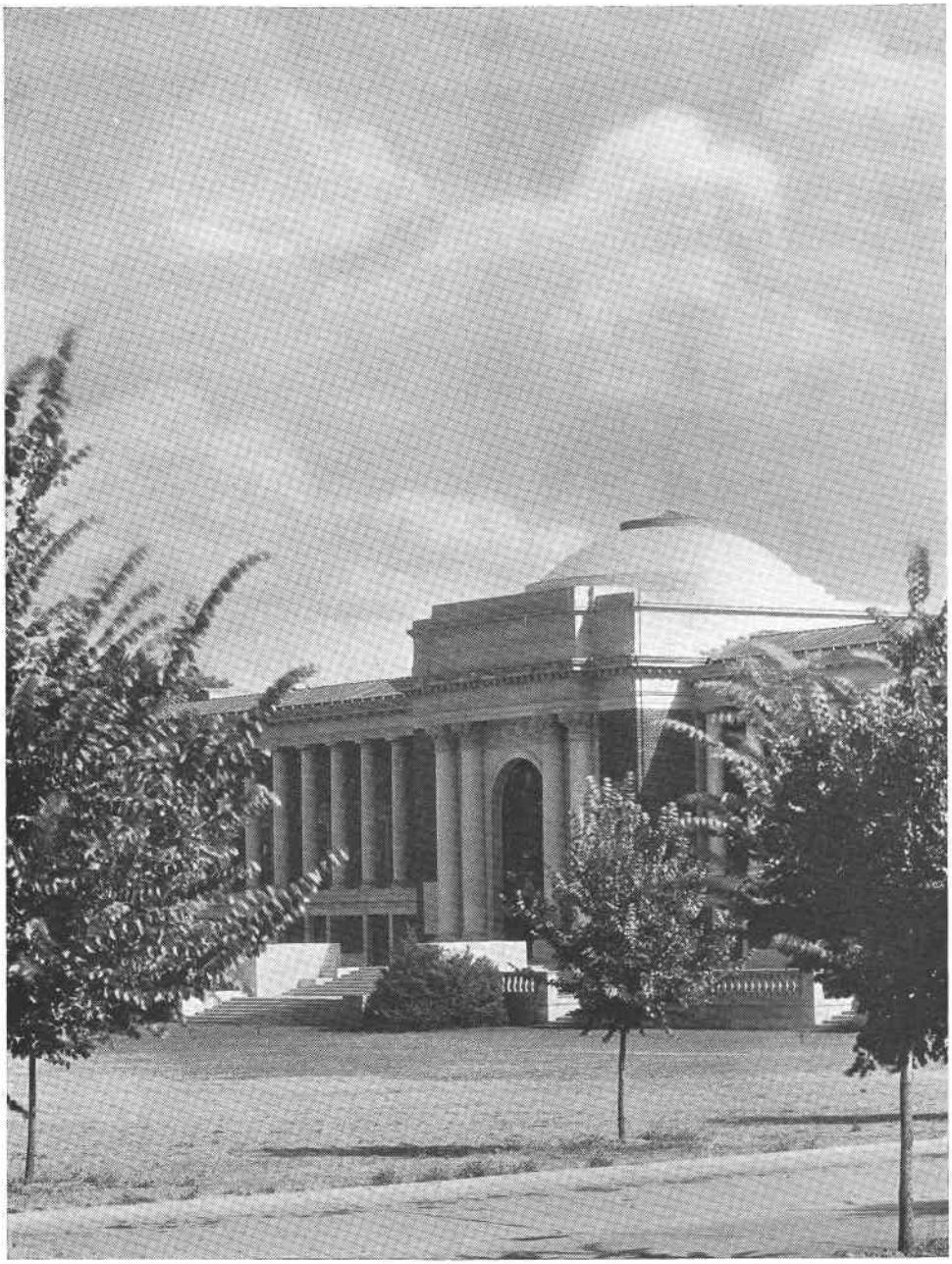
Corvallis, Oregon

VOLUME XIII

1932



Oregon State Honors Her Fallen Men With the Memorial Union

FORWARD

This year's Annual Cruise is another book portraying the School of Forestry and its activities at Oregon State College together with a review of the graduates and what they are doing. The staff has endeavored to make this year's annual worthy of the Forest School and its ideals.

We hope that it will serve to enrich the memories of those who have left the school and be a record of the year to the undergraduates. If we have accomplished the above our purpose has been fulfilled.

PINE SLOPES

FORESTS in shadows of Evening
Content in their silent watch;
Guarding the food of the rivers
And holding the streams to the notch.

Branches gently swaying in the breeze
Bidding the day good-bye;
Screening the lowered sun's rays
In a picture sweet to the eye.

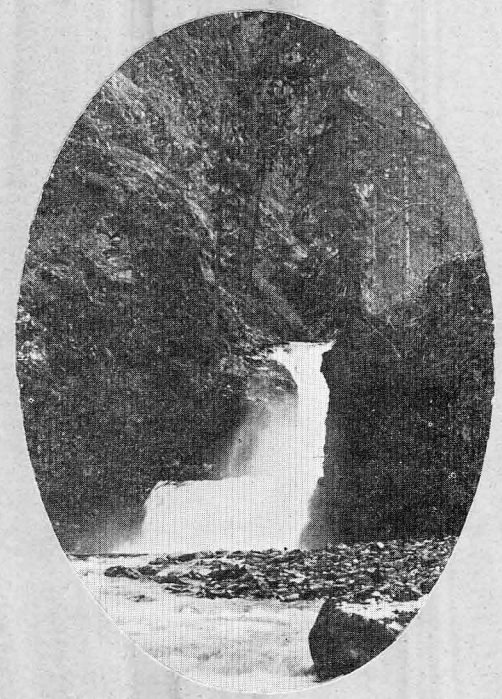
The home of the woodland birds
Who sing to me sweetly at dawn;
The playground of graceful doe
And her innocent, fairy-like fawn.

You land of the untrodden sod;
Beautiful, wild, and immense;
Pure as the breeze that blows
Through your rich green foliage dense.

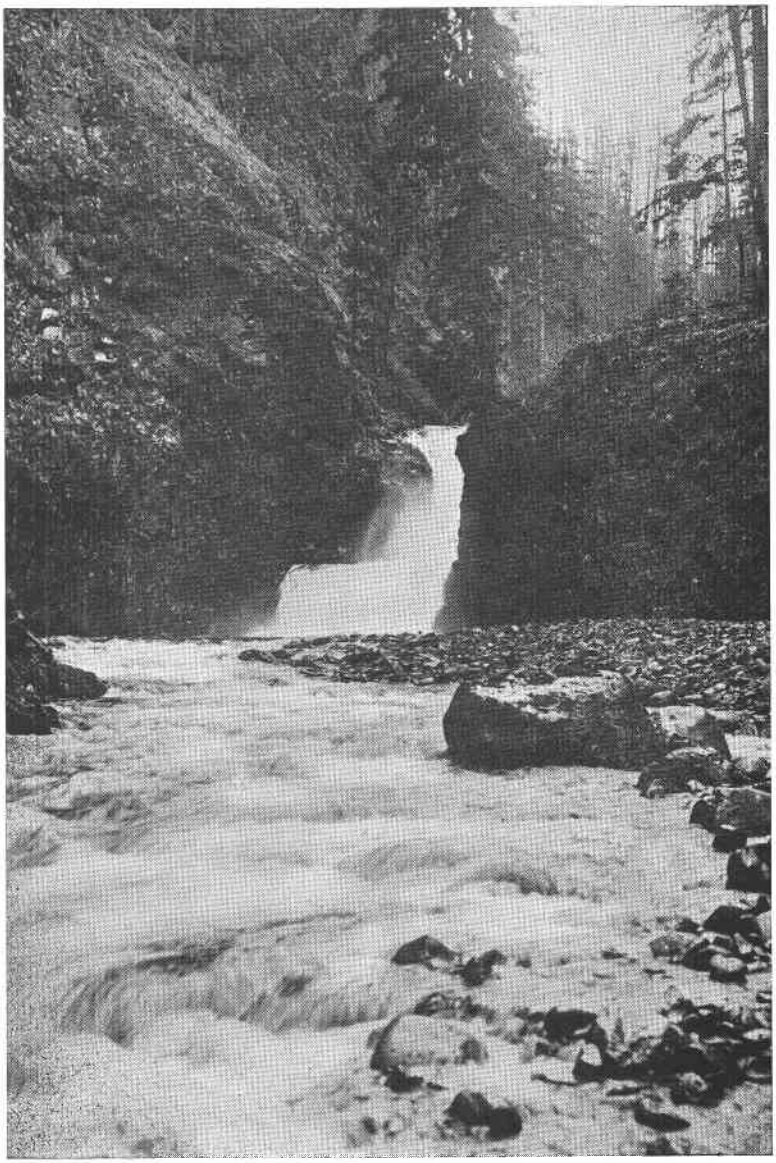
Those tree-fringed, mirror-like lakes
With a background of snow-capped peak,
And a waterfall droning at dusk
That surely to my soul does speak.

O, land of the whispering pine
With brooks of a crystal hue,
I would that my hand could paint
The picture my heart sees in you.

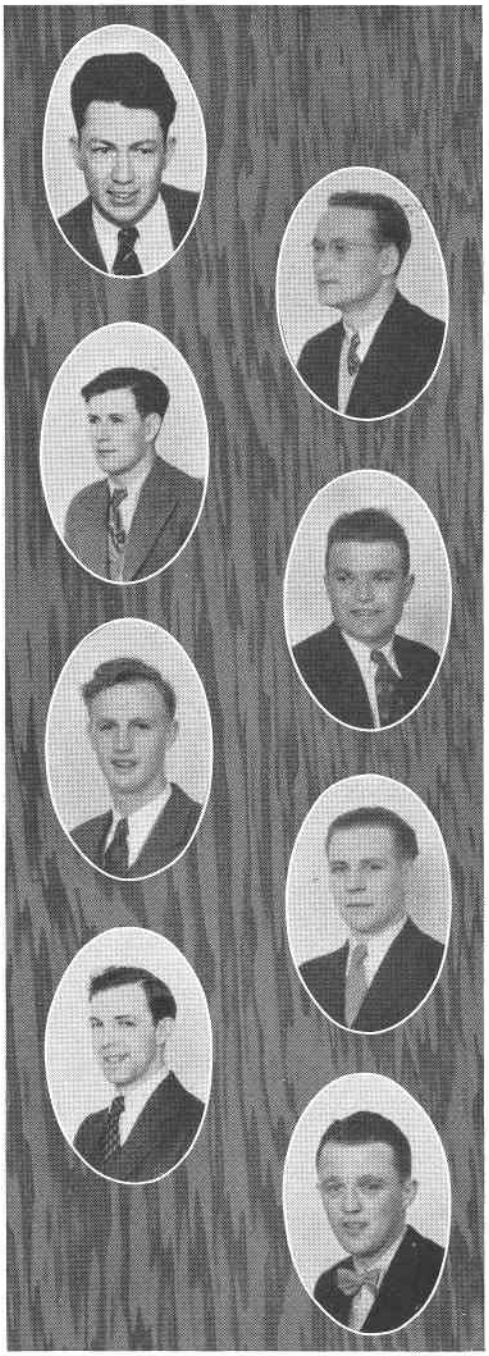
—CLEON CLARK, '32



The Seniors



Another Rapid in the Stream of Life Is Past



BEAL, ROBERT P. "Bob"
Los Angeles, Calif. Tech. Forestry
Activities:
Beaver Knights 1-2; Major R. O. T. C.
Soc. Amer. Military Eng.
Experience:
Eng. Dept. of Shell Oil Co., '26-'27
Surveyor, Los Angeles, '28-'29-'30

BERGER, PHILIP K. "Phil"
Duluth, Minn. Lumber Manufacture
Activities:
Forest Club Sec. 2
Annual Cruise 1-2
Experience:
Logging Operation '26-'27
The Powell River Co. '28
Brooks Scanlon Lumber Co. '29-'30
Hines Lumber Co. '31

BOWNE, WALTER B. "Bullet"
Bonanza, Ore. Lumber Manufacture
Activities:
Forest Club Treas. 4
Annual Cruise 3; Assoc. Editor 4
Varsity Debate 3-4; Xi Sigma Pi 4
Experience
Whitman Nat. Forest '29-'30-'31

CARSON, HOMER "Kit"
Vancouver, Wash. Tech. Forestry
Experience:
Columbia Nat. Forest '25-'26-'27
Olympia Nat. Forest '28-'29-'31
Cascade Nat. Forest '30

CHURCHILL, GEORGE W.
Roseburg, Ore. Tech. Forestry
Activities:
Forest Club Sec. 3; Ath. Mgr. 4
Exposition 1-2
Crew 2-3-4; Annual Cruise 4
Experience:
Umpqua Nat. Forest '24 to '30-'32
Grazing Survey, Utah '31

CLARK, CLEON L.
Bend, Ore. Tech. Forestry
Activities:
Forest Club Pres. 3
Xi Sigma Pi 3; Sec. 4
Experience:
Tumalo Breeders Ass'n '23 to '28
Siskiyou Nat. Forest '29
Deschutes Nat. Forest '30-'31

CORY, H. NEWELL "Chet"
Lakeview, Ore. Logging Engineer
Activities:
Daly Educational Fund
Experience:
Fremont Nat. Forest '29-'30-'31

DOYLE, JOHN B. "Johnny"
Oregon City, Ore. Lumber Manufacture
Activities:
Major R. O. T. C.
Experience:
Ass't Chemist, Hawley Pulp & Paper Co. '30

FOWELLS, HARRY A. "Rusty"
Corvallis, Ore. Tech. Forestry
Activities:
Rook Forestry Award
Dorm. Council 1-2-3
Third Vice-Pres. Student Body 2
Ind. Student Council 3
Hall Club Pres. 3; Xi Sigma Pi 3
Forest Club Pres. 4
Phi Kappa Phi 4
Experience:
Umpqua Nat. Forest '29
Wind River Exp. Station '30-'31

GUSTAFSON, WALTER A. "Gus"
Corvallis, Ore. Lumber Manufacture
Activities:
Glee Club Accompanist 1
Westminster Council 1-2-3-4
Junior Prom 3; Annual Cruise 4
Inter-Fraternity Council 4
House Pres. 4
Experience:
Inman-Poulson Lumber Co. '28
Fremont Nat. Forest '29
Mt. Hood Nat. Forest

HANSON, ORRIE W. "Swede"
Bottineau, N. Dakota Tech. Forestry
Activities:
Choir '26; Annual Tour '26
Glee Club '27
Sec. of Student Body '27
Basketball '27
Football '27
Transfer from P. R. Luther College '27
Experience:
N. Dak. Highway Marker '28-'29
Forest Woods Map '31
Xmas Tree Sales, Eldorado '31

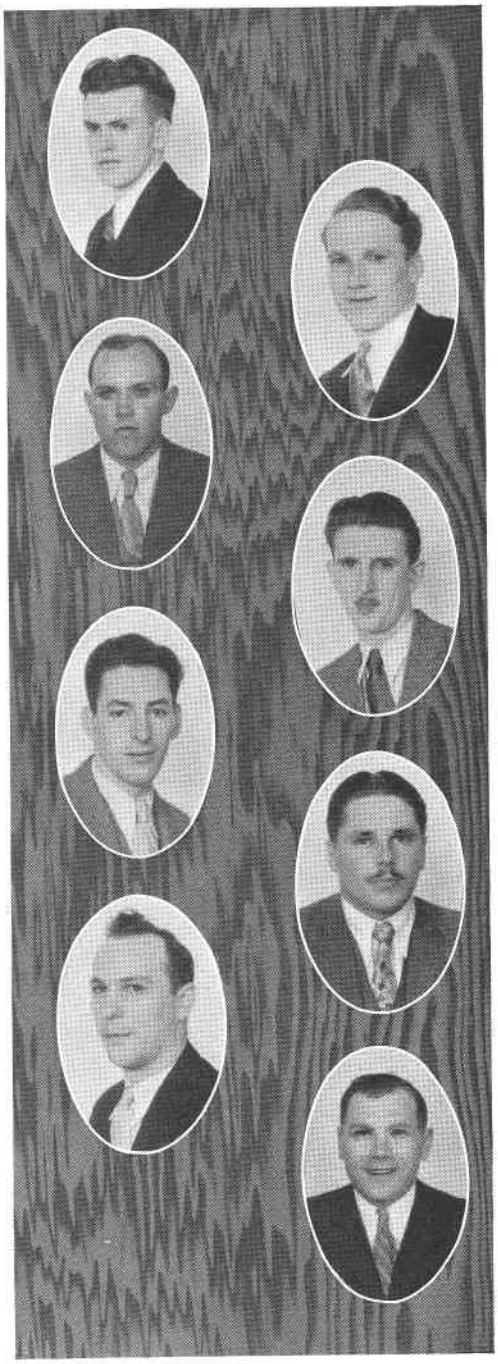
HORN, RALPH W.
Portland, Ore. Tech. Forestry
Activities:
Hall Pres. 3-4; Social Chairman 2
Dorm Council 3-4; Treas. 3
Annual Cruise 3-4; Beaver 3
Arboretum Committee 4
Experience:
Columbia Nat. Forest '29-'30
Siuslaw Nat. Forest '31

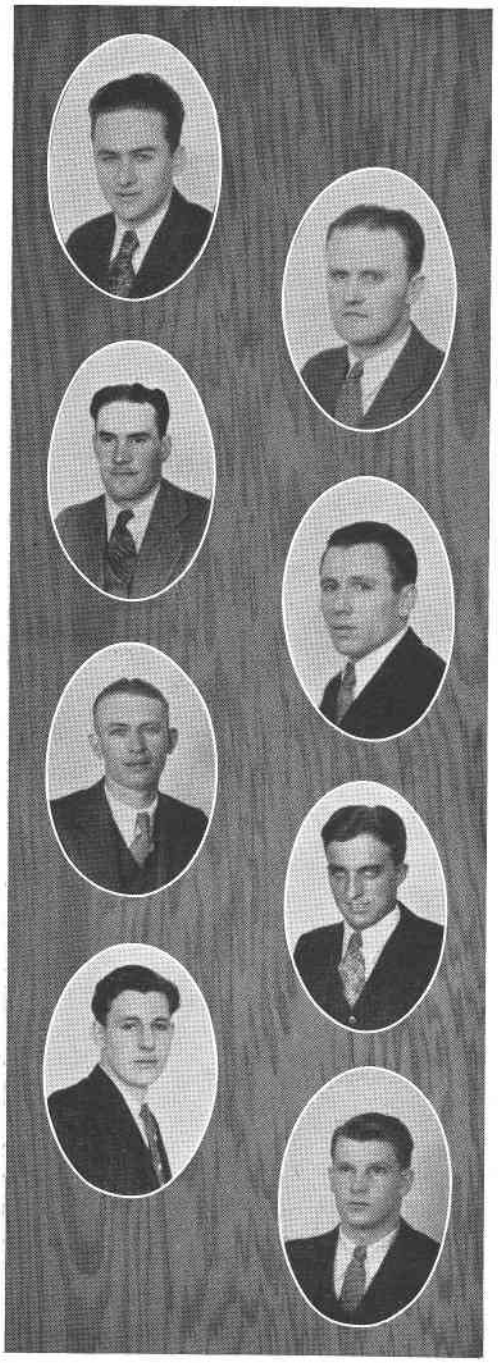
HUNT, LEE O.
Corvallis, Ore. Tech Forestry
Activities:
Exposition 3; Cross Country 3
Minor "O" Assoc. 3-4
Experience:
Blister Rust Control '28 to '31

JARVI, SIMERI "Simp"
Astoria, Ore. Tech. Forestry
Activities:
Xi Sigma Pi 4; Crew 1-2-3-4
Forest Club Vice-Pres. 4
Experience:
Logging '27-'28
Sawmill '26
Mt. Hood Nat. Forest '29-'30-'31

JOY, FRED L. "Freddy"
Portland, Ore. Tech. Forestry
Activities:
Xi Sigma Pi 3
Annual Cruise Ass't Editor 4
Experience:
Blister Rust Control '28-'29-'30-'31

KORNOUHOFF, ALEXIS T.
Portland, Ore. Tech. Forestry
Experience:
Cascade Nat. Forest '28-'29
Bark-beetle Control F. S. '30





LADD, CHARLES H. "Charley"
Corvallis, Ore. Tech. Forestry
Experience:
Cascade Nat. Forest '28 to '31

LEISHMAN, MILTON L. "Bing"
Baker, Ore. Lumber Manufacture
Activities:
Rook Football; Crew 2
Chairman Olympics 1
Homecoming Com. 3; Chairman Jr. Prom 3
Capt. R. O. T. C. 4; Scabbard and Blade 4
Student Body Pres. 4; Student Council 4
Board of Control 4; Pub. Committee 4
Experience:
Oregon Lumber Co. '28-'29
Crown Willamette Paper Co. '30
Vancouver Plywood Co. '30
Whitman Nat. Forest '31

LEWIS, ROBERT O. "Bob"
Wamic, Oregon Tech. Forestry
Activities:
Crew 1-2; Mgr. 1
Beaver Knights 1-2
Rifle Team 2-3-4; Vice-Pres. 4
Colonel R. O. T. C. 4
Experience:
Clearing Right of Way '27
State Highway Const. '28-'29
Mt. Hood Nat. Forest '30-'31

LOVIN, CLARENCE V.
Corvallis, Ore. Tech. Forestry
Activities:
Xi Sigma Pi 4
Experience:
Forest Pathology '29-'30-'31

LOWDEN, MERLE S. "Governor"
Crawfordsville, Ore. Lumber Manufacture
Activities:
Phi Kappa Phi 3; Xi Sigma Pi 3
Alpha Delta Sigma 4; Beaver Knights 2
Annual Cruise 3; Editor 4
Barometer Feature Ed. 4
Point System Chairman 4
Sigma Delta Chi Journalism Cup 4
Theta Sigma Phi Feature Cup 4
Homecoming Committee 3
Phi Kappa Phi Freshman Award
Experience:
Hammond-Tillamook Lumber Co. '30-'31

LUCAS, HORACE A. "Duke"
John Day, Ore. Logging Engineer
Activities:
Xi Sigma Pi 3; Assoc. For. 4
Annual Cruise 3; Mgr. 4
Vice-Pres. Forest Club 3
Phi Kappa Phi Freshman Award
Exposition 1-2-3
Fernhopper Banquet 4
Men's Halls Council 2
Vice-Pres. Hawley Hall 2
Experience:
Timber Surveys '29-'30-'31

MOFFITT, JOHN "Johnny"
Lakeview, Ore. Lumber Manufacture
Activities:
Beaver Knights 2; Crew 1-2
Junior Prom 3; Xi Sigma Pi 4
Experience:
Whitman Nat. Forest '31
Scaler, Modoc Nat. Forest '29
Scaler, Crane Creek Lbr. Co. '29
Sawmill Work '28

MOISIO, WALFRED J. "Fritz"
Astoria, Ore. Tech. Forestry
Activities:
Track 3; Crew 2
Experience:
Long Island Logging Co. '28-'31
Mt. Hood Nat. Forest '29-'31

NELSON, EVERALD E. "Nelly"
Corvallis, Ore. Lumber Manufacture
Activities:
Alpha Zeta 3; Xi Sigma Pi 4
Kappa Kappa Psi 3; Band 1-2
Alpha Delta Sigma 4
Transfer from C. A. C.
Forest Club Treas. 4; Crew 4
Annual Cruise Ass't Editor 4
Experience:
Hammond-Tillamook Lbr. Co. '31
Texas Natural Gas Co. '30

PARKE, WILLIAM NORWOOD "Nor"
Eugene, Ore. Tech. Forestry
Activities:
Polo Club 1-2; Greater O.S. C. Com.
Forest Club Sec. 3; House Pres. 4
Interfraternity Council 4
Experience:
Malheur Nat. Forest '29-'30-'31

PARKER, EDGAR J. "Eddie"
Corvallis, Ore. Tech. Forestry
Activities:
Rook Track 1; Beaver Knights 1-2
House Pres. 4; Annual Cruise 4
Pres. Ind. Student Council 4
Student Interest Com. 4
Experience:
Rakestraw, Pyle Nursery Co. '29-'30
Whitman Nat. Forest '30-'31

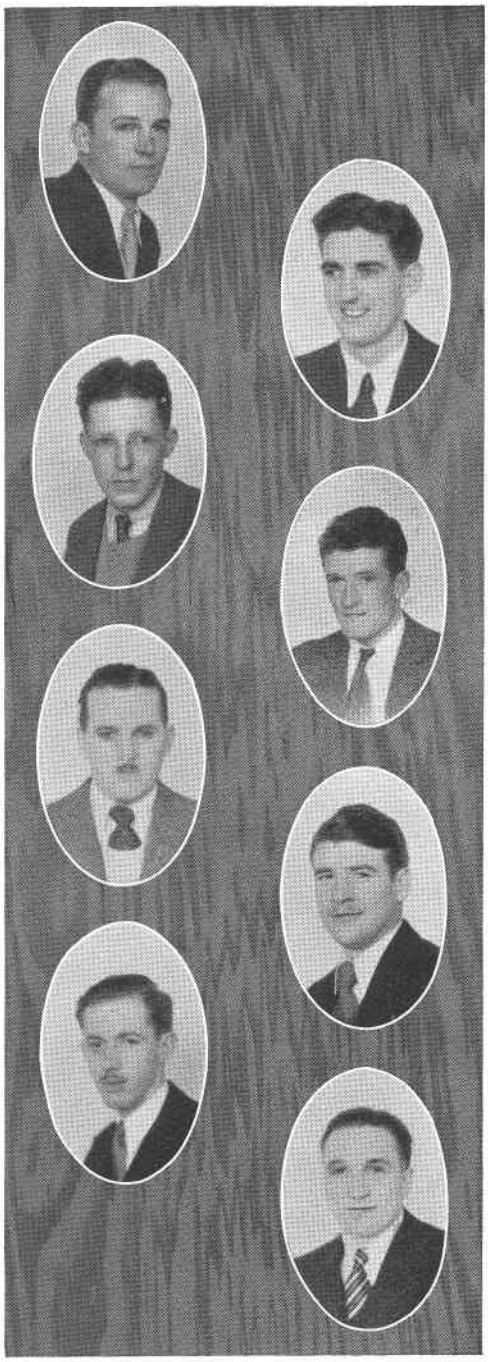
PARKER, JOHN R. "Johnny"
Corvallis, Ore. Tech. Forestry
Xi Sigma Pi 3; Historian 4
Scabbard and Blade 3; Capt. R. O. T. C.
College Tumbling Champion 4
Forest Club Vice-Pres. 3
Experience:
U. S. Geological Survey '26-'27
Road Location '28-'29-'30
Malheur Nat. Forest '31

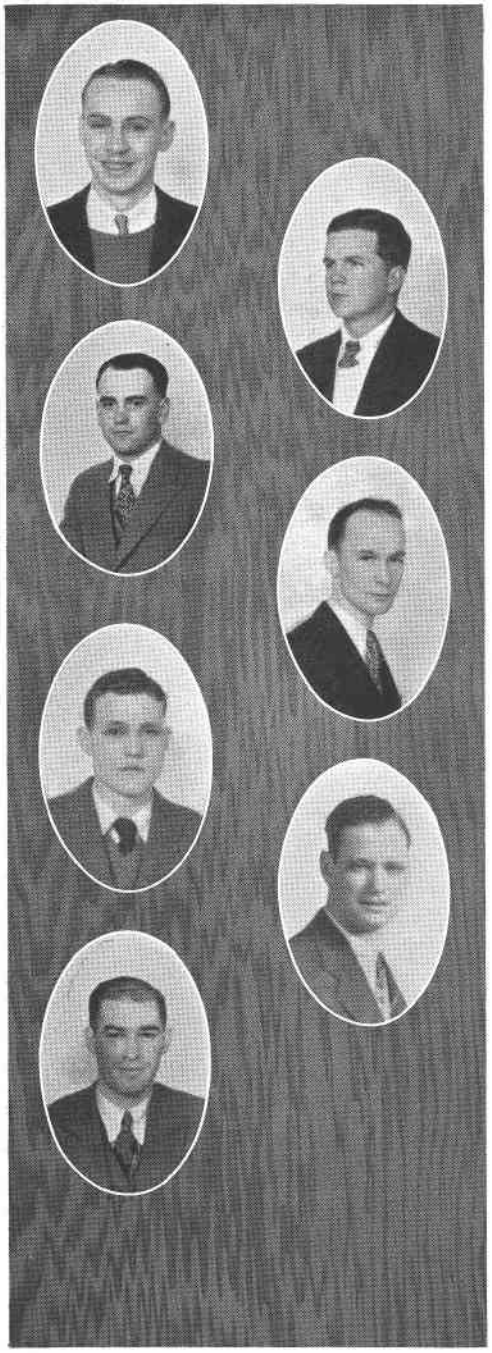
PARKER, VELDON A. "Peewee"
Vernonia, Ore. Tech. Forestry
Activities:
Forest Club Auditor 4
Annual Cruise 3-4
Crew 2-3-4
Experience:
Oregon American Lbr. Co. '29
Deschutes Nat. Forest '30-'31

PATCH, DENNIS "Denny"
Weiser, Idaho Lumber Manufacture
Activities:
Beaver 1; Debate 1-2-3-4
Delta Sigma Rho 3; Pres. 4
Exposition Chairman 3
House Pres. 4; Xi Sigma Pi 3
Forest Club Pres. 4
Ass't Mgr. of Forensics 3
Experience:
Yardman '25
Lumber Co., Wash. '26-'27-'28
Forest Survey Crew '29-'30
Forest Fire Patrol '31

POWELL, HAROLD G.
Ridgefield, Wash. Tech. Forestry
Activities:
Exposition 2-3
Annual Cruise 4
Experience:
Brattlie Bros. Lbr. Co. '29
Siskiyou Nat. Forest '28
Cascade Nat. Forest '29-'30-'31

PUHN, WALTER "Poon"
Elma, Wash. Tech. Forestry
Activities:
Xi Sigma Pi 3
Crew 4
Experience:
Siuslaw Nat. Forest '29-30
Scaler, Markhamas & Callow Log. Co. '31
McCleary Timber Co. '28





SMITHBURG, EDWARD J. "Smithy"
Salem, Oregon Tech. Forestry
Experience: Lumber Manufacture
Kanikus Nat. Forest '26-'28
Coeur d'Alene Nat. Forest '27
Spring Arboretum Trip '28
Cascade Nat. Forest '29-'30-'31

STEWART, LORAN L. "Stubby"
Cottage Grove, Ore. Logging Engineer
Activities:
Xi-Sigma Pi 4
Colonel R. O. T. C. 4
Scabbard and Blade 3; Capt. 4
Chairman Goboon Com. 4
Experience:
Bohemis Lumber Co. '29
Crater Lake Nat. Forest '30-'31
Coos Bay Lumber Co. '27

TEDROW, MAURICE "Ted"
Marshfield, Ore. Tech. Forestry
Activities:
Xi Sigma Pi 3
Arboretum Committee 4
Experience:
Coos Bay Lumber Co. '27
Coos Bay Fire Patrol '28-'29
Crater Nat. Forest '30-'31

WALKER, ESTEVAN A. "Steve"
Portland, Ore. Tech. Forestry
Activities:
Crew Ass't Mgr. 2
Experience:
Cascade Nat. Forest '27 to '31
Columbia Nat. Forest '29

WHEELER, WALLACE "Wally"
Corvallis, Ore. Tech. Forestry
Activities:
Rook Track 1
Varsity Track 2-3-4
Greater O. S. C. Com. 2
Experience:
Mt. Hood Nat. Forest '27
Columbia Nat. Forest '28-'29-'30
Blister Rust Survey '31

WING, HAROLD "Red"
Astoria, Ore. Lumber Manufacture
Activities:
Forest Club Treas. 3-4
Rook Football

ZANE, E. W. "Ed"
Corvallis, Ore. Logging Engineer
Activities:
Rifle Team 1-2
Hall Pres. 4

Corvallis, Oregon
June 1, 1932

The Biggest Mill Company,
Portland, Oregon.

Gentlemen:-

It is my sincerest desire to offer to you my services for the future. I feel that I am conferring a great honor upon your concern by considering your company among the many possible organizations to which I might apply.

I am 23 years old and will complete my course at Oregon State College in a few days. I will then take a short vacation, and I suppose you will be very anxious to take me into your office immediately.

In college I have shown my ability in numerous activities. When a freshman I was appointed on a committee of five to determine whether a five or six piece orchestra should be chosen for a freshman dance. Since that time I have served on numerous dance committees, and in every instance have shown my aptness to make important decisions.

In addition to these appointments I am sargent-at-arms of the literary club.

During the past three summers I have worked as a soda clerk, have run a gas station, and played in a jazz band. And here I might state that I am very good at playing a clarinet.

As to my grades in school I have very little to say, but in spite of the fact that they seem low, this is not really the truth as all the profs have been down on me.

I will now put the clothes on this letter and ask you to tell me when to report. Hoping to hear from you by return mail, I remain

Your future president,

Joe College

A Perfect Evening

THE golden radiance in the west,
Leaving so charming a light,
Signifies for all to rest,
For the sun has said, "Good night."

Now as we look out over the dells,
All tinted with purple and blue,
And can scarcely see the snow on the hills,
We're ready to bid adieu.

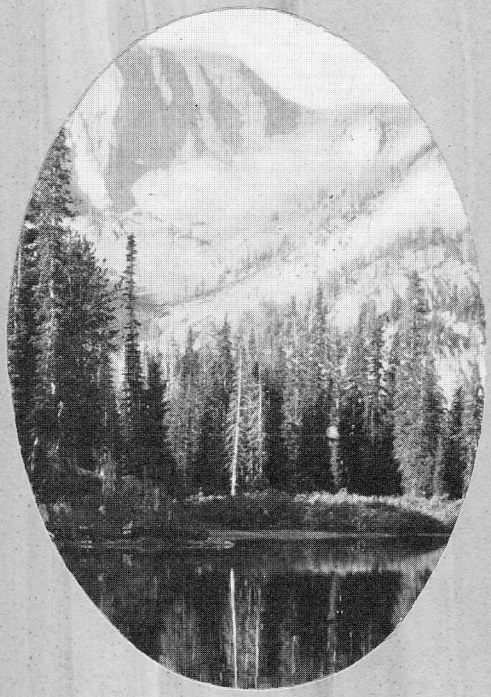
But when we turn in preparing to retire,
And our glance falls in the East,
Our soul is kindled with another fire,
For we sight a symbol of peace.

The moon has just come over the peak,
And with it a pale white light;
And our heart registers a different beat,
When we think how young is the night.

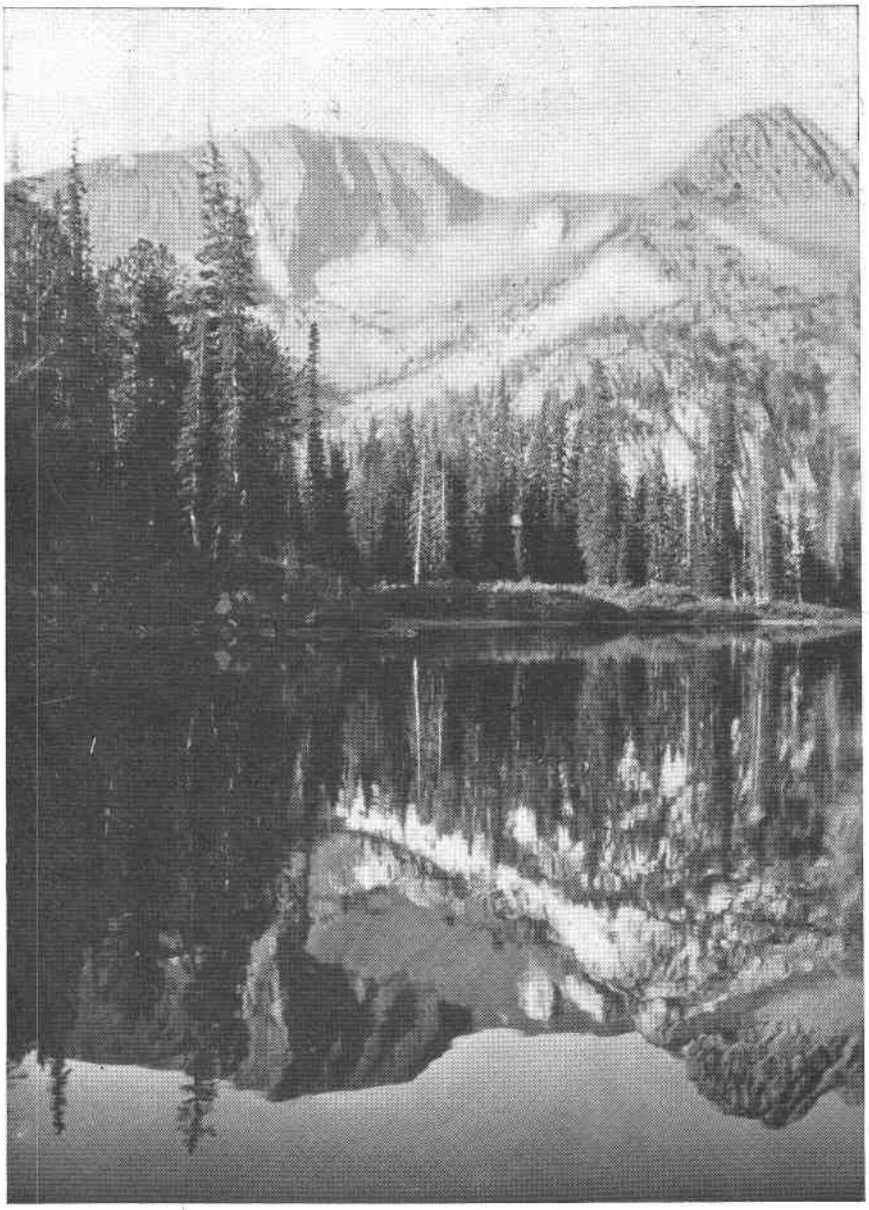
As we sit—silently and still—
Gazing in the afar,
We are met with still another thrill—
The coming of the stars.

Alone, with no one to converse,
Our thoughts, that never tire,
Are of the universe,
Beauitful—beyond desire.

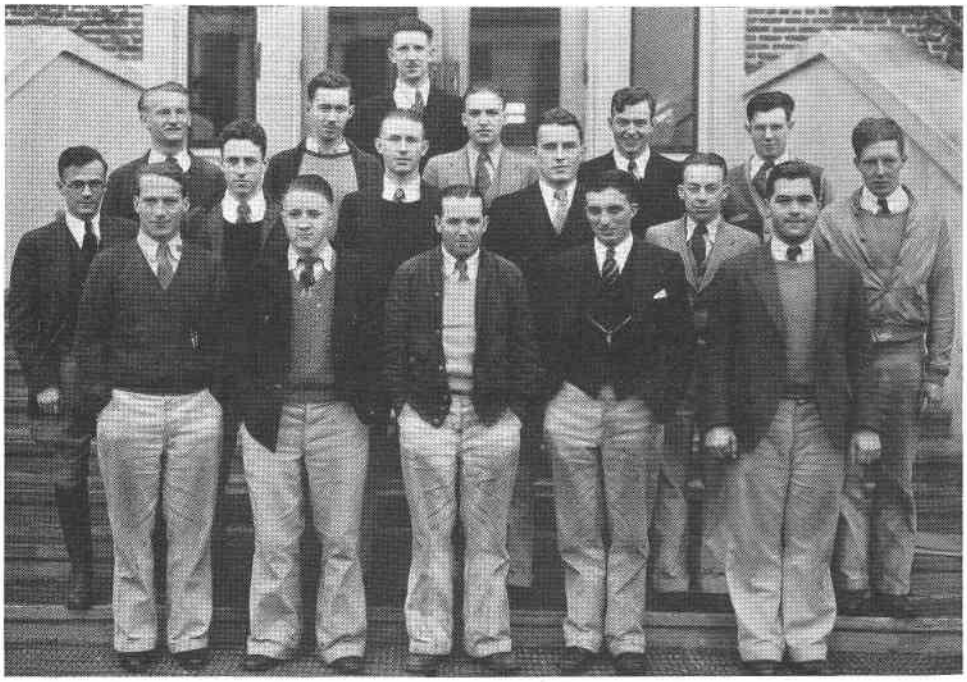
VELDON PARKER, '32



School Activities



Work Is Play If You Make It So



Front row: left to right: Walt Gustafson, Joe Lammi, Veldon Parker, Horace Lucas, Rolf Reierstad
Second row: Hugh Stewart, Herb Willison, Merle Lowden, Everald Nelson, Francis Foley, Edgar Parker
Third row: Henry Tiedemann, Harold Powell, Waldo Peterson, Stan Bishoprick, Walter Bowne
Fourth row: Ralph Horn

VOLUME XIII 1932

THE ANNUAL CRUISE

EDITORIAL STAFF

Editor.....MERLE LOWDEN
Associate Editor.....WALTER BOWNE
Assistant Editors.....EVERALD NELSON, FRED JOY
Department Editors:
Seniors.....GEORGE CHURCHILL
Alumni.....ROLF REIERSTAD
Humor.....FRANCIS FOLEY
Art.....HUGH STEWART
Assistants:
Walter Gustafson, Henry Tiedemann, Harry Forse

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Assistant Manager.....HERB WILLISON
Advertising Manager.....VELDON PARKER
Circulation Manager.....RALPH HORN

Assistants:

Stanley Bishoprick, Harold Powell, Howard Stoop, Joe Lammi, Waldo Peterson.

Editorial Comments

Another "Cruise" Goes Forth

This issue of The Annual Cruise marks the thirteenth number of the yearbook which was started in 1920 with Earl Mason as editor and Andrew F. Brennan as manager. It is the hope of the staff that this 13 does not cast any dark shadows on this year's book. With obstacles to overcome that were more than ordinary the staff this year has endeavored to put out a book that was truly representative of the school. The school section has been especially stressed along with special attention to the alumni section.

In the thirteen years during which the "Cruise" has been published many changes in make-up, arrangement and material have been made. This year's book again presents a variation in annuals although the difficulty of making any great improvement over last year's book was fully realized.

Reports are still being received commenting upon and praising that issue and although there is no national competition among forestry school annuals, critics have been together in agreeing upon The Annual Cruise as the best forestry school publication in the United States last year. With this wonderful record and accomplishment to maintain, the staff this year has endeavored to at least carry along if possible the high esteem and prestige which the annual has achieved.

As will be noted, nearly all of the feature articles in the book this year are by alumni or students of the school. It was thought that to hear of their work, accomplishments and experiences in the forestry profession would be of more interest than special articles by experienced men of whom the reader might have little knowledge. At the same time the length of the main features has been reduced with the idea that short snappy articles would be more appreciated than detailed presentations.

All branches of forestry have as far as possible been given a place in the book. Logging and lumber manufacturing articles are included with those touching on the different phases of the Federal Forest Service and the State Department of Forestry. Things which are new to the industry, as the use of radio, are discussed to give the reader an insight into the up-to-the-minute advances in the profession.

The editor wants to take this opportunity to commend the staff for the fine cooperation and service which they have given throughout the entire year in endeavoring to make the book a success. Much time and effort has been expended by the entire personnel to make this year's "Cruise" a book which would portray the school and its activities to the "grads" and to the general public. If we have accomplished that in a small degree we feel that our work has not been wasted.—M. L.

The Forest School of Oregon State

The Forest School at Oregon State College is truly one of which any alumnus can feel proud. Ranking third in size of all forest Schools in United States, it is considered as one of the best schools in this technical field. Like every other tangible thing, however, it had its beginning. In 1909 with an initial enrollment of 17, the forestry department, later the Forest School came into existence. It was housed in two rooms and an office on the top floor of the science building and was managed by a faculty of one man.

During the interval which has elapsed since 1909, the enrollment has increased more than ten times and the faculty to seven. The Forest School today occupies a separate building containing facilities for all kinds of related work.

Within the past few weeks we have heard much voicing of opinion regarding the action of the Board of Higher Education and the effect it will have on Oregon State College. Within our own group we have wondered just what the outcome will be in relation to the Forest School. It appears, much to the delight of "Fernhoppers," that any decision which has vet been made will have no effect on the school. In other words the Forest School and the ardent "Fernhoppers" have become so firmly rooted to the Oregon State campus that any great change would be impractical.

Rather than being detrimental to the school, the outlook appears brighter than the old system. With the making of Oregon State a school where all branches of science are offered, a technical school such as forestry will be distinctly benefitted since scientific training in this field is not only desirable but essential.

Grads from the local Forest School are scattered far and wide, many of them holding responsible positions. Even the seedling "Fernhoppers" are becoming prominent and quite widely propagated. According to the Forest Service reports, Oregon State College ranked first in the number of men employed in region six of the Forest Service last summer. Of the 125 Forest School students employed, 59 were from the local school. The nearest competitor was the University of Washington which had 41 men in the field.

Nor is the School of Forestry going to cease growing at this stage. With the unlimited resources for practical forest training which are available to the school and the recognition of the need for more intensive forestry practice, the Forest School should continue its trend toward a bigger and better organization.—E. N.

For the first time the outstanding worker on the Annual Cruise staff was given recognition this year. Stan Bishoprick was selected to receive this honor this year and his name will be placed on the permanent Annual Cruise cup. Herbert Willison was a close runner-up.

Whether You Like It or Not

It all started when, trooping forth like sheep to market, we were exposed to the American educational system at the age of six in the first grade. Since that time most of us have spent from fourteen to twenty years absorbing what is commonly referred to as knowledge. We were young and trusting at first, and our lives were easy to mold. The three "r's" along with a few other subjects comprised the general education received. Some facts—some figures—but on the whole the first eight years taught things we could apply in any line of work. This course was entirely selected for us, because young children do not know what is best for themselves.

Another four years rolled by. We had completed high school, and found that we were credited with having some degree of intelligence. We were allowed to select some of the courses which we desired to take.

Now we arrived at college. Another conventional milestone of four years lay between us and the desired degree. We selected our course and again stepped back to the first grade. Our entire course for two years was mapped out, the last two years allowed one to reach out and do a few things he desired—but oh, so few.

We began to study. Facts, figures and a few things requiring thought began to pile up—but mostly facts and figures. The facts were easily forgotten after the final, and the trusting student registered the next term for more of the same stuff dished up in required courses.

Seemingly the student was still too young to determine what courses would be of particular benefit to himself. To be allowed to take other than recommended electives, to be able to substitute for required subjects that would do the individual no good, to digress from the straight and narrow or cut and dried curriculum was not permissible. Only with sole misgivings as to the outcome of the student who took such steps were such things allowed.

In fact the whole scheme looks as one, not to allow the individual to learn what he wanted, but to mold him to the will of those who had decided what he should be—to make of him a robot turned out by an efficient machine-making machine. It resolves itself into a state of think not as you would like to, study not what you desire, study not what will help you to think, but make yourself a cut and dried product of an institution which knows what is best.

I wonder if it could be possible for an individual who has lived with himself all his life, who knows himself better than any other, and who realizes his own weaknesses; I just wonder if it would be possible for him to know some of the things he needs to complete his education? Can he justify his four years of study if he has not stepped out and rid himself of these weaknesses.—W.B.

Four sophomore foresters set their aim high while freshman last year and as a result received Phi Kappa Phi freshman awards last fall. These four men were Kermit Linstedt, Lawrence Chapman, Marion Nance and George Burnett. We congratulate these men and wish them continued success.

Zeta Chapter—1921
Oregon State College

Founded 1908
University of Wash.

XI SIGMA PI

R. Reierstad

S. Jarvi

L. Stewart

E. Nelson

M. Lowden

R. Evenden, Forester

H. Lucas, Ass't Forester

W. Puhn

H. Staples

H. Fowells

J. Parker

D. Patch

W. Bowne

Zeta Chapter—1921
Oregon State College

Founded 1908
University of Wash.

XI SIGMA PI

M. Tedrow

C. E. Brown — H. Tiedemann

C. T. Brown — F. Joy

C. Clark, Secretary — J. Kimmey, Exec. Council

C. Lovin — C. Wessela

H. Rapraeger — G. Schroeder

H. Willison — J. Moffitt

Xi Sigma Pi

Xi Sigma Pi, national honor fraternity in forestry, admits men to membership who have shown consistently good scholarship, characteristics of leadership and cooperation, and have a genuine interest in the profession. With the lumber industry facing a period of adjustment, Xi Sigma Pi finds its responsibility in maintaining a high professional standard and morale in the young men entering the field from the forestry schools of this country.

Of interest to the entire national organization and more particularly to Zeta chapter at Oregon State, was the eighth biennial convention of the fraternity held December 28, 1931 at Portland, Oregon. At this meeting Zeta chapter relinquished the national chapter to Eta chapter of the Pennsylvania State College. The new officers are J. A. Ferguson, forester; Arthur C. McIntyre, associate forester; and Wm. G. Edwards, secretary and fiscal agent. The retiring encumbents were E. G. Mason, H.R. Patterson, and T. J. Starker respectively.

Several amendments to the constitution were discussed and voted on and action taken on other matters of interest to the fraternity. Many alumni members of Zeta chapter took advantage of the opportunity to attend the national meeting.

On the evening of March 8, 1932, Ranger Wm. J. Baker supervised the initiation of fourteen neophytes into the fraternity. Those initiated were Loran Stewart, Harold Rapreager, Clarence Lavin, Ralf Reierstad, Herbert Willison, John Moffitt, Everald Nelson, Walter Bowne, Herbert Staples, Simeri Jarvi, Henry Tiedemann, George Schraeder, Carol Brown, and Carlos Brown.

Active members assisting in the initiation were Horace Lucas, Dennis Patch, Maurice Tedrow, Walter Puhn, Clean Clark, Conrad Wessela, John Parker, James Kimmey, Merle

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Awards

May 25, 1932—nothing happened to go down in the history of the world, but the Forest club made a little of its own. A big official meeting was held at the log Cabin and nearly every forestry student was present. The dean explained the place of the School of Forestry in the new educational setup in Oregon and awarded the School of Forestry prizes for the year.

Harry Fowells received the McDonald fellowship in reforestation for the coming year. This fellowship was made possible by the donation of a $10,000 fund to the school by Mrs. Mary J. L. McDonald of San Francisco the income of which is given to the holder of the fellowship and which is $675 per year. Merle Lowden received the sister fellowship to this one, the research fellowship in dry kilning given annually by the school.

The Charles Lathrop Pack prizes given to the best writers of student articles along forestry lines and intended to interest the general public in forestry were awarded to Merle Lowden, first; Harry Fowells, second; and Walter Puhn, third. These were for $48, $29 and $19 respectively.

The cruiser jacket which Dean Peavy awards to the rook making the most grade points for the first two terms was awarded to Arthur Wirch who had accumulated 91 points so far.

A Kangaroo court climaxed the evening's entertaingent and the fellows adjourned with "Down Under the Hill."—W. B.

KILN PRIZE GIVEN

The Moore Dry Kiln Company of North Portland this year awarded a prize of $75 to the student in lumber seasoning at the School of Forestry who was best qualified to carry on a research problem in kiln drying. This problem had as its main purpose the determination of the change in moisture content of two-inch kiln dried dimension stock in planing. Complaints have been received by a number of lumbermen that stock has been of

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The "Spring Trippers" Camp

The 1932 Spring Trip

It was on the twenty-third day of May, 1931, that more than 75 embryo engineers set out for the back country to learn a few points on locating trails and roads. Seldom does such a motely crew leave the campus of a modern college. Freshmen and sophomores for once smoked the pipe of peace and set out together for a few days in the woods.

Four of the School of Forestry trucks were required to haul this colorful group to Sulphur springs, a clear bubbling spring of sulphur water about 8 miles northwest of Corvallis. By five o'clock that afternoon a camp stood out, clear cut in the fast fading evening sun. The quiet grassy meadow surrounding the spring was now a scene of brown and white tents not unlike a mushroom colony after a spring rain.

The entire group was divided into parties of four each, and as the shadows began to fall throughts were turned to food. Need it be said that then and there a cook was unanimously elected for each party and the honors conferred with great gusto?

The next morning things started out in earnest. The newly elected cook, not to be found wanting, was up bright and early rattling pots and pans and doing business on a large scale. Eating breakfast in a new camp is a serious thing—nothing is handy, and the small things like sugar and cream are usually at the bottom of the grub box, or back home on the pantry shelf. The eggs for breakfast, though somewhat mangled and colored by ashes, tasted very good. The coffee, like the eggs, stood on its own merits, and possibly could have stood an almost anything. Some of the fellows ate heartily while some of the others reflected upon the hasty method of electing the cook.

Of course all good things must come to an end, so it was announced that instruments would be issued and projects assigned. In due course of time the men were all scattered in

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The Forest Club at the Cabin on the Arboretum

Another Ring on the Forest Club Log

This year marks the twenty-fifth anniversary of the Oregon State Forest club. Through this quarter-century period the club has grown and prospered, both in regard to increase in membership and development of "true Fernhopper Spirit." The present membership of the club establishes a new record in having 186 members. Beyond doubt the Forest club is the most active of any of the student-faculty clubs on the campus.

The intent of the original founders and sponsors of the Forest club was to have the organization serve as a means of stimulating interest in the profession of Forestry by affording students in the club personal contact with men prominent in forestry work, and to inspire and provide for the development of good fellowship and lasting friendship among the members of the club. The two purposes of the club are today fulfilled to an almost unbelievable degree of success.

To discuss the Forest club without mention of the intense and fine cooperative spirit prevailing in it would be to do the club an injustice. Regardless of the proportion of the projects attempted by the club, a 100 per cent cooperation of all members is assured. The characteristic "go get 'em" spirit of the Forest club can be pointed out as the foremost distinguishing feature that pervades its worthwhile endeavors.

This year as in past years, the Forest Service cooperated with the club in providing professional forestry speakers for the technical meetings of the club. Many pertinent forestry problems were discussed by able speakers in the regular club meetings. Numerous films pertaining to phases of forestry work were also presented. According to the custom of the club, Arboretum day is observed once each term. On this occasion members of the club contribute a full day's work in developing the Arboretum tract. Each year this development work reaches greater proportions, and the fine spirit in which the work is accomplished speaks adequately for the interest in the project.

The fifth annual Forest club banquet was in every way a success. Eats and entertainment were "par excellence." After Walter Mulford, head of the forestry school at the University of California, had delivered his inspirational address, "The American Forester," everyone from the lowliest rook to the peer of professional men represented, must have felt a deeper appreciation of the profession of forestry and its real worth.

As the warm spring days approach, the long anticipated "Brush Rassle" draws nigh. On this occasion fernhoppers and their co-ed partners seek the beauties of nature in a colorful picnic at the Arboretum.

This year activities of the Forest club have been very successful, and "the true spirit of the Fernhoppers" will carry the club on to even greater attainments in the future.—D. P.

FOREST CLUB OFFICERS

FIRST HALF-YEAR

President	Dennis Patch
Vice-President	John Parker
Secretary	Herbert Staples
Treasurer	Harold Wing
Sargeant-at-Arms	Simeri Jarvi
Athletic Manager	Richard Baechtel
Auditor	Gerald Burwell
Yell Leader	Norman Spangenberg
Critic	Professor E. G. Mason
Gaboon Chairman	Loran Stewart

SECOND HALF-YEAR

President	Harry Fowells
Vice-President	Simeri Jarvi
Secretary	Conrad Wessela
Treasurer	Walter Bowne
Sargeant-at-Arms	Kermit Linstedt
Athletic Manager	George Churchill
Auditor	Ralph Horn
Yell Leader	Douglas Hole
Critic	Fred J. Schreiner
Gaboon Chairman	Norman Spangenberg

Fire Cooperation

Last summer R. F. Grefe of Region 6 of the Forest Service and R. E. McArdle of the Pacific Northwest Forest Experiment station conducted some tests on the range of visibility from lookouts. The study consisted mainly of determining the distance which and the detection time in which lookouts could pick up varying amounts of smoke as produced by smoke candles. On one of the tests the equipment was set up on the edge of a mill pond about a quarter of a mile from a mill in the Upper Wind River valley. Just nineteen minutes after the first of a series of candles had been lit, three men came on a dog-trot, armed with shovels and buckets to put out the fire! That, I should say was cooperation. —H. A. F.

A Swedish scientist has discovered wood that is a substitute for meat. Soon you will be able to eat yourself out of house and home. Marry a forest ranger girls; he'll know where all the choice cuts are.

Forest Experts Speak

The School of Forestry was fortunate this year in securing five forestry experts of the United States Forest Service to speak at various meetings of the Forest club during the second and third terms. They were secured through an arrangement with C. J. Buck, regional forester of the Forest Service.

The first lecture was given by Allen H. Hodgson, assistant forester of the government service, on "Personnel Problems." The fact that technical training received in college is of great value although it does not guarantee an efficient man was pointed out.

George C. Griffith, assistant in public relations of the Forest Service, gave the next talk on "Selling Forestry." He stated in the course of his lecture that success in professional work depends to a large extent on public opinion. His address was illustrated with slides and moving pictures showing the value of the forests and the importance of protecting them against fire. He was accompanied by W. V. Fuller, secretary and man-

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Our Own Who's Who

The Arboretum Grows

Expansion and Improvements of Tract Recorded

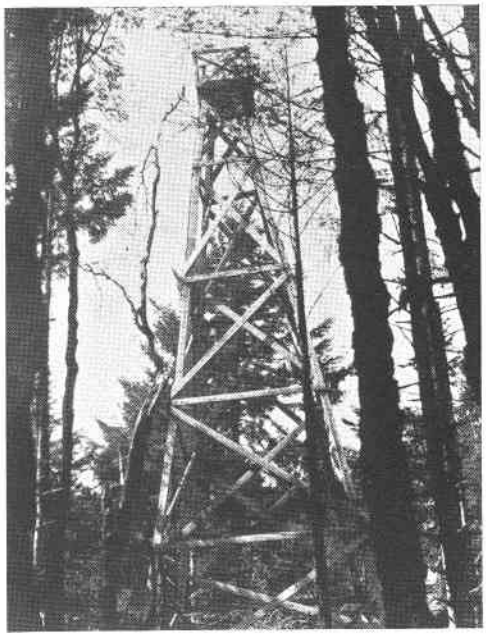
"Bigger and better" seems to fit the Peavy Arboretum project which as it grows and improves each year becomes to the students more and more of a shrine and monument of the School of Forestry. Great has been the changes made in this project since the 80 acres seven miles north of Corvallis were bought in 1925.

The original idea of an arboretum for the school has expanded into two projects—arboretum and school forest. The 92 acre tract on which the cabin is located has been definitely set aside for arboretum purposes and already plantations of over 55 species of trees have been established on this tract. This tract was named the Peavy Arboretum in honor of the Dean.

The School forest of approximately 1300 acres was officially designated as the McDonald Forest by the Oregon State Board of Higher Education this year in honor of Mrs. Mary J. L. McDonald who has been the principal donor of the area. The arboretum committee of the Forest club handles the contributions of students, alumni, and friends which are given toward building up the project.

Changes at the arboretum the past year besides the additions to the McDonald forest have included the completion of an 80-foot tower on the highest point of the forest for fire protection use. A new fireplace was also added to the south end of the cabin to match the one at the north end.

Jim Kimmey, as a portion of his work on the McDonald fellowship, this year made a pathological survey of the arboretum and McDonald Forest for the purpose of listing and classifying some of the more important and conspicuous fungi. This information should be of great value in any preventative or control projects undertaken in the future.



Protects Arboretum

As the School forest and Arboretum expand, and are improved each year it becomes more and more the workshop of the "Fern-hoppers." More and more it meets the purpose which T. T. Munger, director of the Pacific Northwest Experiment station, set forth in his speech upon the dedication of the tract in January, 1926, and from which we quote:

"This tract is going to serve, and serve most admirably as I see it, a three-fold purpose. First, it is going to be a class-room with life-size models, with a hillside as the teacher's blackboard. * * * Second, this is going to be a research laboratory. Experiments will be tried here that will add to the world's store of knowledge. There will be discoveries that will revolutionize forest practice. * * * Third, this is going to be a demonstration forest, which should radiate object lessons in forestry all over the country-side."—M. L.

The "Fernhoppers" Travel by Truck

Riding in Style

"Two-Bits" and "Six-Bits" are no more—at least not as two of the picturesque trucks which the old grads will remember as providing the means of transportation for the "fernhoppers" in the days gone by. New and modern trucks have replaced these relics and they have had to take their place in the junk heap beside other well-worn vehicles.

H. R. "Pat" Patterson, professor of logging engineering, remembers when the loggers in the fall of 1920 were in the habit of hiring a taxi to transport them to their work because no other means was available. The "timber beasts" would take the taxi to the school house on Oak creek and from there walk three miles to the location of the day's work at the head of the stream. Thus the loggers of those days were seen to have ridden to work in style.

It was about the next spring or in the early part of 1923 that "Six-Bits," an old style Sampson, was purchased to carry the fellows on their field trips. "Six-Bits" covered many miles in those days, taking the "fernhoppers" on field trips and serving as a moving van for the annual spring trips.

Later "Two-Bits," a one-half ton Ford truck, was purchased to help carry the rapidly increasing gang of foresters. These two could not properly carry the large number of students, so later two more trucks were added to the school's equipment. At that time "Six-Bits" was cast aside and delegated to a much less dignified task of use on the Children's Farm Home north of town. As far as is known, the farm home still owns the old Sampson and according to the last reports it is still in use.

The three trucks which remained after "Six-Bits" was sold, fulfilled the needs of the school until about one year ago when two new Dodges were purchased. Then last fall another one of like model but slightly smaller was purchased and at this time it was "Two-

Bits" that was scrapped. The old Dodge familiarly known to the students for its odor was then disposed of to the Ag school and since has been used some by the athletic department. What a downward path the old boat has followed!

The present motor equipment of the school includes the three new Dodges and an old-old Ford, "Four-Bits." The names of "One-Buck" and "Two-Bucks" have been recently designated to the two larger new trucks by some of the students, but as yet these "monacers" haven't stuck.

These trucks are used to carry the future loggers and foresters to field work which is being carried on in many places near Corvallis. At the Avery wood-lot and at local sawmills mensuration studies are being made, the logging engineers are devising a theoretical railroad for King's valley and the Soap creek country, and the rook "fernhoppers" are busy throughout the year surveying and mapping portions of the McDonald Forest and of the Arboretum tract.

Each term field trips are taken to milling and logging operations, forest nurseries and other forest projects throughout the state. The annual trip to the Crown Willamette paper mill at Lebanon was taken this year as was the trip to the Southern Pacific preservation plant at Eugene. The sophomores are planning to take a trip this spring to the school's tract of timber near Crater Lake and the senior loggers are planning a trip of their own through Southern Oregon. These trips all call for a means of traveling which is both swift and sure. The present equipment of the School of Forestry provides this.

Many a forester has trudged through snow on a cold winter evening from the location of the day's work to the end of the road. There he knew would be waiting the trusty "Six-Bits," "Four-Bits," Two-Bits," or one of the other well-known trucks which would transfer him from the bleak cold hills to the warmth of his room in town. On these occasions the trucks presented a welcome sight and it was with a sigh of relief that the expiring "fern-hopper" seated himself, ready to make the trip back to town with its bright lights and all that goes with them.—M. L.

The Chief and the Foremen

School Kiln Comes to Front

Of the many practical courses given by the Department of Lumber Manufacture of the Oregon State School of Forestry, one of the most popular is kiln drying. Perhaps this can be attributed in part to the modern facilities for research in this field which the college possesses.

Prior to the modern era in the manufacture of lumber, the dry kiln was a minor part of the equipment of a sawmill. Only the higher grades were considered worthy in price and future use of this added refinement. With the widening of markets, increasing competition and the need for a better meeting of the consumer's requirements in a lumber product, the dry kiln has left its former place of comparative obscurity and in modern plants stands as a necessity rather than an auxiliary.

As a necessary companion, the modern dry kiln has evolved the skilled operator and later the superintendent of seasoning. To reach a higher efficiency these men must know "why" as well as "how." The government of the United States has recognized this need with appropriations for research and the Forest Products Laboratory has placed its findings in the hands of the lumbermen.

More recently the leading forestry schools of the country have installed modern experimental kilns as part of their laboratory equipment. In 1929 the local School of Forestry recognized graduate work in kiln drying as part of its curriculum and one of these kilns was installed here.

This kiln is of the internal-fan reversable circulation type and was manufactured by the

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Looking at Oregon State from the Air

Bringing Home the Bacon

"You can't make a man fight if he doesn't want to," so the saying goes, and that seems to have been exactly the attitude of the muckers this year in their annual encounter with our stalwart crew. Although a very vilifying challenge was issued to the dirt-diggers, nary a peep in return came from their part of the campus.

The annual football game was given up several years ago but in its place had been substituted a basketball contest. Our fellows had been looking forward with considerable expectancy this year to downing the lowly muckers but their desire was for naught. As it seems that the Mining school is soon to be abolished, we suppose that in their last sad moments the fellows there were too sad to raise themselves from the grave and submit to torture at our hands.

To Whom It May Concern

Occassionally in the life of every noble, righteous, group of men it becomes necessary for them to descend into the realm of the unclean to mingle with the unwashable vermin of the underworld. So it has come to the attention of our august group that there is upon this campus a certain unworthy sect attempting to raise itself from its well-earned mudhole to the attention of this fair institution. Ordinarily we would not even contemplate this idea of soiling our hands with the filth of their vile surroundings, or of polluting our lungs with the fetid odor of their decomposing environment, but their rude attempts not merely to exist but even to venture with their bleary faces into the light of day here so incensed us that we have voted to take action at once. Whereby, we the Foresters, do hereby challenge the group that are the nadir on the scales of human progress, the Muckers, to meet us on the field of honor (the basketball court) at such time as our profound seconds, conferring with their ignorant representatives shall decide. Soon, but not too soon, shall their rats scurry back to their dung-heaps, and never more merge to defile the beauty of this our school.

Signed—THE FERNHOPPERS.
(From the Barometer)

Even without the big mucker game this year the basketball players of the school turned out for the departmental contests with each class having a team in the running. The saphamores, however, proved to be too much for the others and romped off with the forestry title. In the race for the all-school championship this aggregation downed their first two opponents but ran into a snag in the Voc. Ed. juniors and went down to a 22 to 14 defeat. Members of the soph team were Kermit Linstedt, Marion Nance, Cedric Brandeberry, Robert Aufderheide, Jack Trust, Neil Rice, James Dunning and John Comstock.

Although Coach Schissler's aggregation didn't wipe up the conference last fall, the addition of two foresters to his ranks next season should give him the timber to put out a winning team. Ross Youngblood and John Pitts were the two fernhappers who turn out for spring practice and next fall should see them going great. Dick Boechtel, our versatile senior, was on the baseball squad last year and with a flying start this year should be a big help to Coach Gill. Even though Dick didn't get his sweater last year, as he was credited with doing, he had ought to earn two this year the way he is going. Boyd Rasmussen is the stellar pitcher for the rooks this year. Other "fernhopper" rooks out for the rook team are Edward Fournier and Edward Poland.

Speaking of fighting a short time ago, brings to mind the fact that the school also has its fisticuff champion. Hugh Stewart captured the bantamweight college title last year and with no opponent in that division this year, he was forced to step into the next higher bracket, the featherweights, where he scrapped his way to another championship. This gave him two crowns, that for the featherweight class, and that for the bantam group. Jack Trust was another forester who showed to good advantage in boxing and worked his way to the finals in the all-school meet.

In wrestling, one of our graduate students, Jim Kimmey, wrestled in the all-school finals but with little training Jim was not quite the match for his opponent. Another limberjointed "fernhopper" Johnny Parker, showed up well in tumbling this year and appeared for gymnastic feats between the halves of several basketball games winter term.

Crew seemed to be one of the big sports

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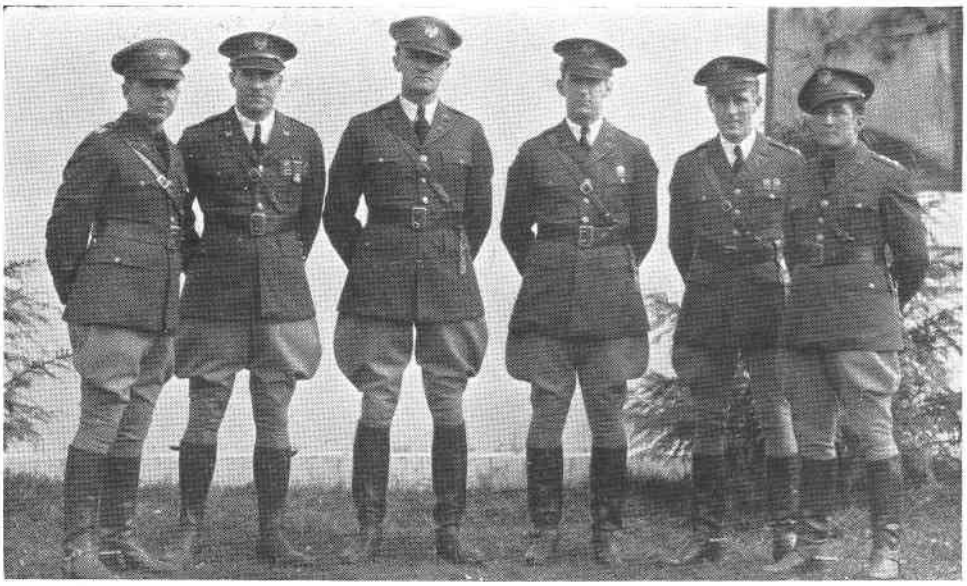


Left to right: Loren Stewart, Bob Lewis, Milton Leishman, Dick Baechtel, Norm Spangenberg, John Parker

Our Fighting Men

For several years foresters have taken an extreme interest in military affairs at Oregon State. Just what the lure has been that has drawn so many "fernhappers" into this activity would be difficult to say, but at any rate they have been there. Undoubtedly the experiences of the men in forestry work have urged them to take up military activities, for in forestry as in military one is always dealing with large numbers of men. Here the foresters have an opportunity to develop leadership, a quality that will be invaluable to them. Then also, one must develop his initiative, because the instructors leave the actual handling of the units with the cadet officers.

This year the "fernhappers" have been in the "daugh." For one school the size of the Forestry School to have two cadet colonels is a distinct honor. The engineers have as their "big shot," Cadet Colonel Bob Lewis, while the artillery Cadet Colonel is none other than Stub Stewart. So, you see, a good bit of the activity rests in forester's hands. Adjutant in the artillery unit is Cadet Captain Johnnie Parker, also known for his tumbling activities. Captain of F Battery, Field Artillery, is Bing Leishman, while Cadet First Lieutenant Dick Baechtel confines his activities to Battery D, Field Artillery, and Cated First Lieutenant Norm Spangenberg does his work in Battery A, Field Artillery.

The activities of forester military men continues still farther into Scabbard and Blade, national honor society in military, where we find Stub Stewart as its leader and Johnnie Parker, Dick Baechtel and Bing Leishman as members.

Last but not least one should mention that both difficult jumping events at the recent horse show, which is sponsored by the military department, were taken by foresters. Dick Baechtel took the open four-foot jump event hands down, and Stub Stewart snatched the blue ribbon in the cadet officer's jump.

Thus it is quite evident that foresters benefit from military training.—M. Leishman.

A Patholgical Survey

In 1928 Mrs. Mary J. L. McDonald of San Francisco gave the School of Forestry a fund of 10,000, the income of which was to be used for a research fellowship in reforestation at the school. Last year Vondis Miller received the fellowship and as his project prepared a management plan for the school forest or **McDonald Forest** as it has now been designated.

This year under the program of the fellowship the first inventory of forest diseases on our arboretum was taken and what a supply we have on hand. A collection of over a hundred of the more important and conspicuous forms was made from the hundreds of species and varieties of fungi existing on the tract. The specimens were preserved, labeled, and filed for future reference at the forestry school. A paper was prepared in which these fungi were classified and the abundance and importance of each species discussed.

Besides the above work another problem was begun along this same line. The four thinning plots established in 1926 are to be periodically examined for rate of deterioration of the felled timber. This year, the first examination, the extent of decay and the fungi causing it were determined by systematically taking samples of the down trees and analyzing them. Every five years a similar examination will be carried on until the material is decomposed.

Forest pathology is in its infancy in this region, with no general studies having been intensively carried on. Many new and interesting facts about forest disease are yet to be revealed, as disclosed by this survey. Plant pathology is more and more taking on an aspect comparable to animal pathology and at some time will without doubt be a very extensive field of study.—J. W. K.

Parke: If we were married darling the hours would roll by without our noticing them.

Girl friend: Do you mean we probably wouldn't be able to afford a clock?

Handcuffed

or Bound With the Golden Ring

"Those wedding bells are breaking up that old gang of mine." It may be a bromidic expression, but it seems to be the theme song of the present Forest club.

It is indeed a frightful state of affairs when nearly one-tenth of the high and mighty organization of fernhoppers have to admit that they have taken the fatal step and answered "I do."

But such is the case.

Five of the class of illustrious seniors indicated on their registration that they had fallen. Robert O. Lewis is the senior of longest standing in the exclusive married men's club. Close seconds are Harry Fowells, Clarence Lovin, John Moffitt, and Fred Joy. They are all men with a great deal of time under the yoke. E. M. Hornibrook, who graduated at Christmas, was also a member. Edgar Parker of Pennsylvania joined the ranks near the end of the second term.

Bob Evenden, the only Post Graduate who had decided that two could live cheaper than one, lost the distinction when Jim Kimmey pulled a surprise marriage at the end of the second term. Lloyd E. Brown, who attended as a graduate student during winter quarter, is another member of the ball-and-chain gang.

In number of married men the junior class is tied with the sophomores. Jess Hathorn and Stan Bishoprick are the men of old standing. Jess' record is one of envy to the other culprits. He has been married longer than any other person in the School of Forestry, barring professors. George Schroeder, our illustrious singer, joined the ranks at Christ-

(Continued on page 71)

On Top of the World

I'M LOOKING down from the mountain heights
Where the shadows come and go,
And I glimpse the gleaming lights
In the valley far below.

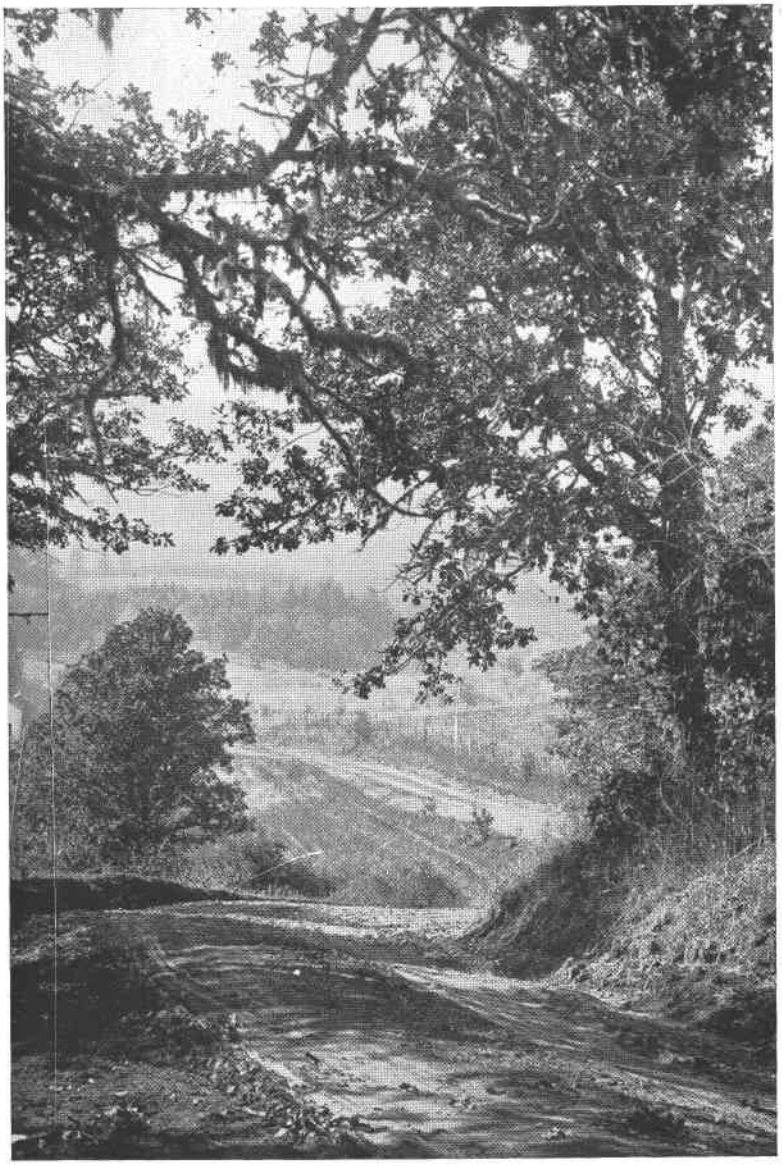
I hear the swish of the swaying trees
Up here on the mountain crest;
There comes to me on the whispering breeze
The voice of the good old west.

I see the twinkling lights of a town,
There, miles and miles away;
It seems not far when looking down,
But to walk it would take a day.

In my little cabin nest,
You'd think I'd be lonesome away up here
But friends, there are plenty of things to cheer
In the heart of the good old West.

—AL CALDWELL

Feature Articles



The Path of Life Leads On and On

Forage Utilization

On

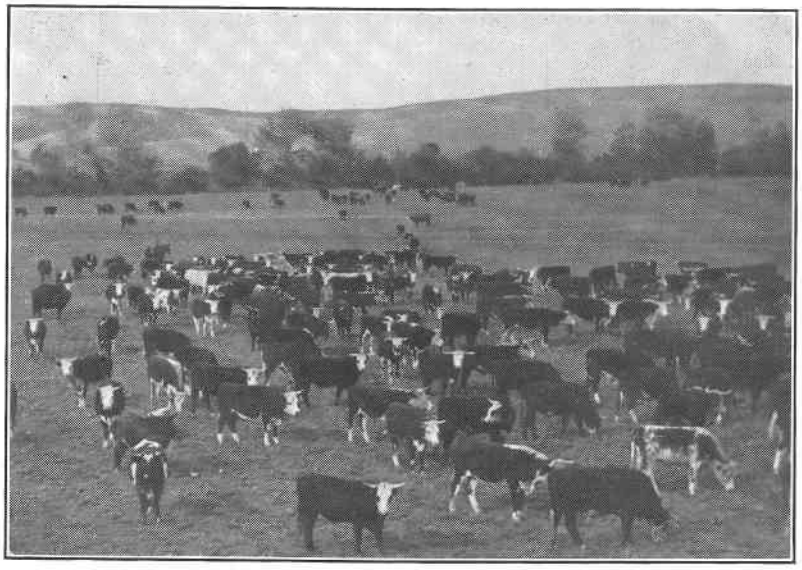
The Forests of the Northwest

WALT DUTTON, Regionol Forest Inspector

The forage produced on the National Forests of the Pacific Northwest Region, embracing the states of Oregon and Washington, is a vital link in the livestock production scheme of this region. Within these National Forests over twelve million acres of land are suitable to the production of forage and accessible to grazing use by livestock. Each year the forage produced on these ranges furnishes pasturage during the summer season to over 100,000 head of cattle and upwards of 1,000,000 head of sheep. To that extent, therefore, the livestock industry in the region is founded on and dependent on a permanent non-decreasing yield of palatable vegetation on these ranges.

The grazing capacity of these ranges, or any range, is their ability to provide feed for livestock on a sustained basis. In other words it means the number of stock which they will carry for a given period without injury to the forage and at the same time assure reasonable gains in the livestock graized Carrying capacity is usually expressed in terms of acres per head of livestock per month or per season. For any one year it depends entirely on the amount of forage produced that year, but over a long period of time it depends upon the extent to which this forage can be utilized without impairing the productive vigor of the more important forage plants.

Past range research work of the Forest Service has established the definite fact that carrying capacity is influenced by a very large number of factors, among which are included: degree, season, and frequency of grazing; climatic factors such as rainfall, temperature,



National Forests Feed Thousands of Cattle

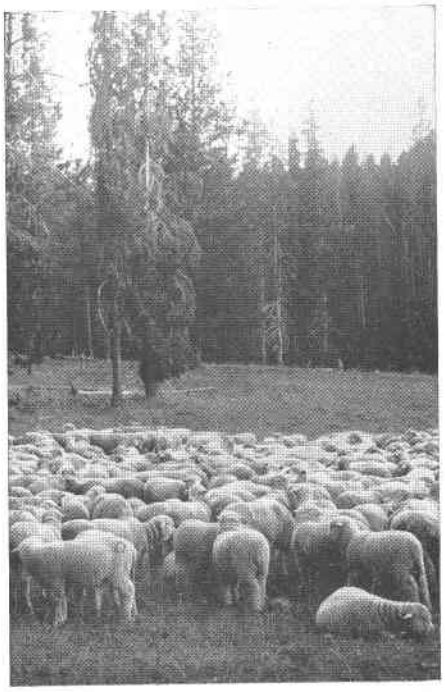
evaporation and soil moisture; soil properties; plant diseases; rodents and insects. This work has not yet progressed to the point where the exact influence of these factors under all conditions can be shown but enough has been accomplished to show that, in some cases, it is tremendous.

Climatic factors, for instance, probably have more influence on carrying capacity than any other group and it is well recognized that variations in climate are the greatest obstacles with which the livestock industry has to contend. Experiments conducted by the Forest Service show that in some sections the total amount of forage produced in any one year may vary as much as 40 per cent below to 40 per cent above average.

No known method exists for controlling variations in climate nor is there much hope that one will ever be found. There are possibilities, however, that scientific range research may eventually discover the frequency with which these variations occur and if that is accomplished it will then be possible to make adjustments in advance to meet increased or decreased forage production. In the meantime both the stockmen and the forester might as well proceed on the basis that drouth years may come at any time.

For a great many years the Northwest was considered to be a region of dependable climate, i.e., the annual precipitation, in both amount and timeliness, was sufficient to insure a good growth of vegetation over most range areas of the region. In this respect it was more favored than many other great livestock producing regions of the West. Stockman and forester alike had come to consider the potential forage production possibilities of the region as a fixed factor in range and livestock management. Now, however, all this has been changed.

The recent drouth period of thirteen years duration and increasing intensity has introduced a new factor which threatens to overthrow entirely the old basis of sustained forage and livestock production. Already there is a marked reduction in volume of feed through drouth influence. Available watering places in many localities have failed for the first time in the history of the industry, and as a consequence the carrying capacity of the ranges goes steadily downward.



The Woolies Rest

A situation of this kind, if not relieved by a return to normal precipitation or if not provided for through constructive utilization, would eventually lead to a condition intolerable from the standpoint of both range and livestock welfare; for the range, it would lead to complete depletion of the palatable vegetation, serious breakdown of the soil formation, erosion and flood damage from accelerated runoff; for the livestock industry it would lead to low calf and lamb crops, poor development of beef and mutton animals, light wool crop, starvation on the range and all-around unprofitable production. This is the challenge which confronts the stockman and forester in the Pacific Northwest and circumstances require that it be met squarely and on a cooperative basis.

(Continued on page 72)

Lumbering in Guatamala

By GEORGE FREY, ex'31

Today I finished making what is perhaps the first donkey sled ever to have been made in Guatamala, that is, one that would hold a barrel of water. We are the only lumber company in the country and we have the only road into the woods that is even passable on horseback. Furthermore, there are no logging machines in the country besides our own.

The supply of timber is immeasurable and equally as large and fine. Commercial species are pitch pine, white and yellow pine, cypress, red gum, Spanish cedar, oak, black locust and mahogany. The timber in the montana or big forest is tall, large in diameter and of highest quality. Trees six feet in diameter and with 200 feet of merchantable length are not uncommon. Forestry practice is unknown.

Much Timber Uncruised

The montana I speak of lies north of us about three miles at an elevation of 4500-6000 feet and is wholly unknown as to size and amount of timber. Whenever work permits I like to go there. It is nearly a day's journey, since every inch of the way must be cut out until you get into the forest where the going is much easier. Right now we are logging pitch pine in a semi-arid country and working toward the montana.

This is a very strange country. As you go up in elevation the rainfall and humidity increase. At El Jicaro, a few miles south of the mill and at an elevation of 800 feet, the climate is a little worse than hell. Here at the mill it is just perfect. My limited experience leads me to believe that life higher up would be less pleasant on account of the extremely cold days and nights with considerable fog and rain. Of course frost is unknown and nearly everything under the sun grows. I saw peaches, blackberries, and bananas all growing close together. Blackberries become trees here forming thickets that are impassable.

Trees Grow Rapidly

Trees make two rings a year here, since there are two distinct growing seasons, but the logs coming to the mill at the present time do not show such wide growth rings. The wood samples from the montana show an optimum wood structure for any class of use. Defects in living trees is less than ½ of 1 per cent. Cypress logs that have lain on the ground many years are still perfectly sound but pine soon rots when it is cut. Our lumber is of a high quality and is much sought after since termites do not molest it.

If some of the things I have written sound extreme, they are true never-the-less, for we are in the edge of a country that is unmapped, unsurveyed, unexplored, and unknown.

EDITOR'S NOTE: The editor wrote to George Frey asking him about lumbering in Guatamala where he is now and this is the reply that was received. Some of it may sound strange but George says that it is straight facts.

Problems Encountered in Forest Survey of the Douglas Fir Region

By H. J. ANDREWS

EDITOR'S NOTE: H. J. Andrews has charge of the National Forest Survey for region six, and is well qualified to tell of the work. In this article he sets forth and explains some of the problems encountered by the personnel in their work. The survey has not been finished yet, but so far many difficulties have arisen which were not thought of when the idea of a survey first originated.

Rather than prepare a paper describing the whole scope of the forest survey as now being conducted by the U. S. Forest Service, I would prefer to describe a few of the many problems encountered in the planning and administration of the work. The amount of space allotted will not permit the listing of all the problems and the article is in no way intended to present anything like a complete picture of the survey. Although brief mention will usually be made of the answers to the problems, the bulk of the article will be devoted to showing the reasons for the problems. Both the present and past tenses are used because the survey was started in the winter of 1929-30 and is still being carried on, so that some of the problems mentioned have been encountered while others are current. The survey is now in varying stages of progress in the Inland Empire, the Lake states, California, the southern pine region, and the southern hardwood region, as well as in the Douglas fir region. It has been going longer in this region than in any other region. Many problems mentioned in this article must have been, or will be, encountered in these other regions.

I will pass up the first major problem of determining what was wanted by simply stating that a decision was made that the Survey should get (1) an inventory of present forest resources (inventory phase), (2) a picture of forest depletion (depletion phase), (3) figures as to growth, both present and prospective (growth phase), and (4) the requirements of the region and the country at large for wood products (requirements phase).

The inventory phase represents the biggest job of the four in terms of man-days or costs. In this phase the first big problem was that of method. It must be kept in mind that the item of cost entered into the the method of doing the job even though the Survey staff in this region was given no specific figures as to cost in either cents per acre or total allotment for the job. It might well be stated then that even ahead of method was the problem of cost.

The only guide to what might be a reasonable cost was the fact that for the nation as a whole the acres of forest land divided by the total allotment for the survey gave a figure of approximately six-tenths of a cent per acre. This did not mean that in every forest region the cost had to come out to exactly six-tenths of a cent per acre, since the volume of timber and the importance of the industry in some regions would allow of those regions spending much more money per acre than certain other regions. However, this figure did imply that in all probability no one region should exceed twice the average per acre figure cost, except at the price of either eliminating certain other regions from consideration or else doing them in a very sketchy manner. It was apparent from the start that the Survey in the Douglas fir region would be justified in spending as much, if not more, on a per acre basis, than in any other region, but even so, there was a probable limit of 1.2 cents per acre. This item of cost at once translated itself into the item of method.

It is, of course, possible to take inventory of large areas (20 million acres or more) of

forest land at costs varying from less than one-fourth cent per acre up to $1.00 per acre which has been spent for the very highest quality cruises in the Northwest. To say the least, this is quite a range and any decision as to even the approximate cost on either a per-acre or per-region basis must rest on the uses to which the data collected are to be put. It must be kept in mind that the Forest Survey does not attempt to gather data which will be of such an accuracy for small, localized areas that they can be used for local administrative purposes, such as timber sales, land exchanges, etc. Rather, it must be satisfied to have figures for type acreages and volumes of timber which will be correct for areas no smaller than counties or groups of counties, since this degree of localization of data should be sufficient for national, state, and county forest policies.

It was at once apparent that there were two possible ways of doing the job: (1) the so-called "compilation method," which consists of the taking of all existing data and the amending and adjusting of these data so as to bring them to a reasonably uniform standard, with original field work done only on those areas for which no data exist, or, (2) the "strip method," which consists of a sampling of the region by rather widely spaced strips, in which the money is spent entirely on original field work. In the first method a type map of a rather general nature is possible and the data as to timber volumes and types can be localized to a considerable degree, while in the second method, a degree of sampling by stripping which might be expected to be of a cost comparable to the compilation method would, of course, give no type map and would not localize statistics of volumes and types to areas smaller than about a million acres. However, the strip method would probably result in a little more consistency and uniformity of data for the region and a detail of volume by diameter classes and minor species which the compilation method cannot obtain. Suffice it to say that after considerable experiment with both methods, a decision in favor of the compilation method was made.

Having decided on the use of available data, together with mapping in place for all lands not covered by existing data, control presented another major problem. It is necessary for field men to know their location on the ground, and cost limits precluded any system of control lines laid out in advance of field work such as are a routine part of any forest mapping job where greater costs are allowed. It was obvious that roads, streams, railroads, lakes, and any other man-made or natural features must serve as control, in which case the accuracy of the type mapping would be proportionate to the quality of the maps available.

It was found that no one set of maps put out by any one agency in the region was sufficient for the purpose. In addition, even though a good set of base maps at a uniform scale for all counties in the region had been found, the amount of type data desired involved considerable notation on the map, and it was evident that the type lines and type data would conflict with the base data.

The answer to this particular problem was to furnish field men with 1-inch to the mile

township plots printed on white poper. On these plots the field men ossembled oll bose doto for the township, whether from one source or from mony. They were olso furnished with 1-inch to the mile township plots printed in green ink on tronsporent vellum poper. These tronsporent vellum sheets ore inserted in the totum holders over the mode-up bose mop ond the field mon is then oble to mop on this vellum overloy without hoving ony bose doto on his type sheet but still hos the bose control showing through from beneoth.

Another problem wos thot of volume tobles. Existing Forest Service volume tobles hod not been built to fit either the new stondords of utilizotion set up for the survey or the size ond quolity of timber found on the best sites in the privotely-owned londs. New volume tobles for oll the importont species in the region were constructed. It wos soon opporent thot the existing yield tobles in the region hod not been designed to fit the porticulor stondords of utilizotion set up for the survey ond these yield tobles hod to be modified to fit survey stondords ond olso to fit different degrees of stocking.

In determining whot type scheme to use there were mony problems presented ond, noturolly, mony vorious individuol opinions. The first big problem in determining the type scheme wos whether to type on the so-colled "volume" method or to type on the so-colled "noturol" method which shows the botonic composition of the stond in o degree which the so-colled volume method does not. The type scheme used is one which is essentiolly o volume method but, ot the some time, one which gives o reosonoble ideo of the species combinotions found within the type.

Another problem which confronted the Survey wos how to show stocking ond oge within eoch type ond still not mop with o refinement which would be out of proportion to the ollowoble cost. In order to keep within certoin cost limits, field mopping hos to be done ot o reosonobly ropid rote, which meons something between two ond four thousond ocres per doy, olthough in difficult country o mon moy only do o section o doy. This considerotion ot once brings up the question of minimum type oreos, which in turn brings up the question of how ore the type mops to be used, ond how uniform or homogenous is the region os to types? A minimum type oreo thot would be sotisfoctory for o region or o port of o region where cutting, lond cleoring, ond fire hove not messed up the country, ond where there ore brood exponses of country with uniform type conditions, would be of no volue whotever in onother region or port of a region where fire, cutting, ond lond cleoring hove so cut up the types thot the country is o potchwork of smoll oreos, eoch with voriotions of type, oge, ond stocking conditions.

Minimum type oreos which ore too lorge give o poor, if not erroneous, picture of potchy country, while minimum type oreos which ore too smoll so slow up the work thot costs ore beyond occepted limits. It wos decided thot for merchontoble timber ond form lond types, no oreo of less thon 40 ocres would be recognized, ond olthough ot the stort of the work on orbitrory limit of obout 600 ocres wos set on second-growth types, this limit hos been obondoned in proctice. It must be remembered thot o different oge closs or stocking condition

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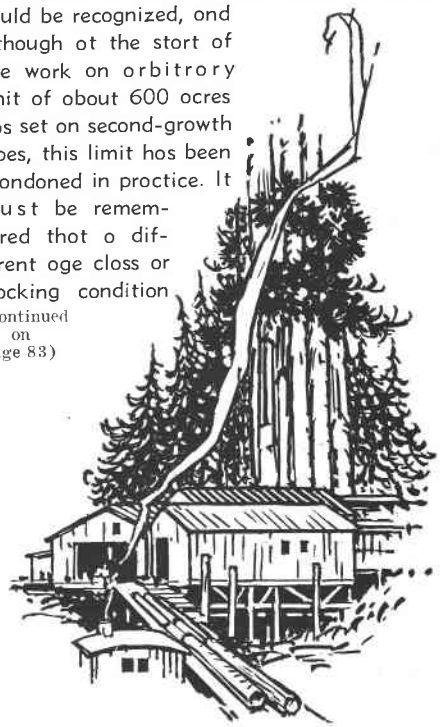

Treating Poles in Service

By MILES COMPTON, '34

Companies that use thousands of telephone and telegraph poles each year are realizing the necessity of finding some method by which the life of the poles may be extended. The durable chestnut poles found along the Atlantic sea-board and in the inland woodlots were the principal sources of supply until the chestnut blight gained foot - hold and made them nearly extinct during the last ten years.

When searching for a substitute to replace the disappearing chestnut, the cedar was not as extensive as that of the chestnut. During the past few years the cedar pole supply has been furnished from the Lake State region, and even from as far as the vast cedar swamps of Ontario, Canada. High freight costs of shipping the cedar made it necessary for the companies to start experiments on methods of prolonging the life of the poles.

The Pole is Charred

The Western Union Telegraph company realized this urgent need about 1920. They also decided that there might be a possibility of treating poles already standing in service.

The experimental work was carried out on the eastern division of the company along the Erie Railroad. The treating process finally worked out was known as the "char and spray process," and was divided into two principal parts; first, the charring of the poles, and second, spraying the charred surface with hot creosote. The equipment used in the work was kerosene blow-torches, pressure spray tanks, chisels, wire brushes, picks and shovels.

The earth was removed from around the pole to the depth of eighteen inches, being piled as removed into a four-foot circle to serve as protection against grass fires while the poles were being charred. While the poles were still moist from the earth, all decayed wood was removed from the bottom of the pole to eighteen inches above the ground. This work was done with a three-inch chisel fitted to a long handle and a wire brush which cleaned the dirt from checks and seams. All shavings were cleaned from the hole to eliminate fire hazards. Three days of warm drying weather was required to put the pole in condition for charring. If the weather was damp the poles were not touched until favorable weather permitted.

Charring the poles proved to be the most disagreeable part of the work. Two men, each equipped with a pressure tank with a burner connected to it by ten feet of hose, worked together. Each burner outfit, when filled with

This article presents a method of treating poles which will probably be new to most of the readers. Compton has had considerable experience in this work and should be competent to explain it. The work was important in that it showed the variation that might be made in preservation treatment.

five gallons of kerosene oil, weighed fifty - five pounds. When the poles were on sloping ground and in many places where dense brush grew up around them, burning was a task that tried the strongest The men operating the burners were required to wear goggles to protect their eyes from stones bursting from the intense heat and on windy days the flames of the torches were often carried three or four feet by sudden gusts of wind. Usually the men worked on opposite sides of the pole, however, when it was windy they stood on the same side and the wind carried the flames around the pole. The 36 inches of cleaned surface was burned until a white char appeared on the surface.

When conditions were normal this required four minutes per pole on a class B line. Lines are classified according to their leads or number of wires the poles are carrying. Each class has specifications as to the length and diameter of the poles and the number of poles per mile. The heaviest lines were the class A and required five minutes to burn. Five gallons of oil usually furnished fuel enough for forty poles or one mile of class B line. It required about six gallons of oil to burn one mile of class A line.

Following within the distance of two or three charred poles was a man equipped with a pressure sprayer tank containing creosote. He also was required to wear goggles and heavy gloves to protect himself from the hot creosote as the safety valves were liable to open from excess pressure sending off vapor that burnt severely. The tank held five gallons of creosote and was equipped with a metal hose and nozzle weighing sixty-five pounds. To insure the maximum effect, the creosote was heated in the tanks to a boiling temperature. This was done by turning the burners on the tanks after each filling. While the char was still hot from the burning, the creosote was sprayed on, saturating the charred surface to the point of running. Five gallons of creosote treated fifteen poles of a class A line and twenty of the class B line.

The holes were allowed to stand open three or four days after treating, giving the creosote sufficient time to dry and thoroughly soak in. Refilling the holes was a particular job. It was necessary not to hit the charred surface with tools or rocks. If the charred surface was broken the work was spoiled as it gave a place for decay to start.

When completing the estimate for the expense of pole treatment, it was a question whether to appropriate a lump sum for each job or allow a specified amount per pole. It was finally decided that $1.45 would be allowed per pole. This amount was to cover the cost of labor, material, tools and equipment. However, after three years of work it was found that the average was slightly less than the $1.45 appropriated. Some jobs ran as low as $1.35, while others cost $1.52 per pole. Weather conditions proved to be the biggest

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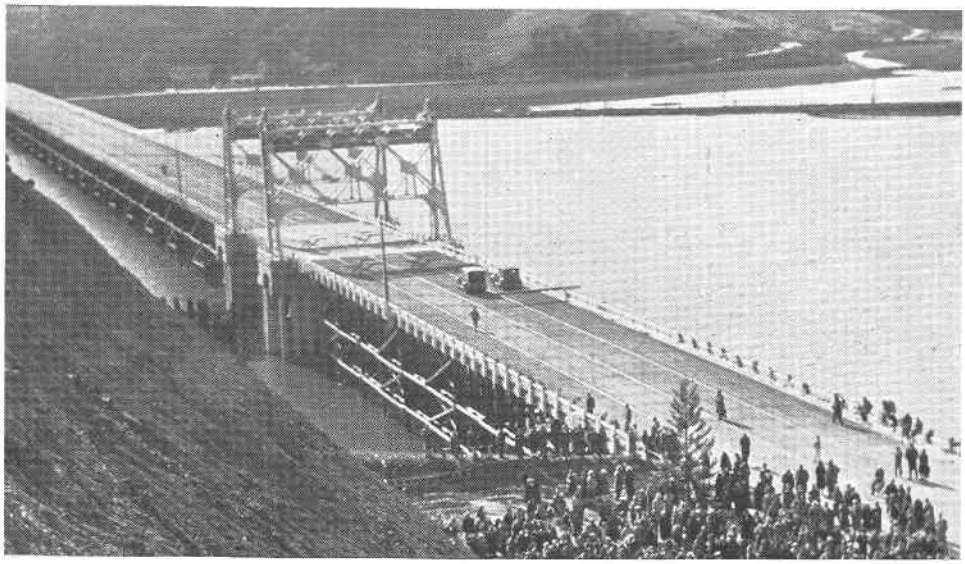
Decayed Wood is Removed



Redwood Bridge Proves Its Worth

Use of Timber in Highway Construction

By T. J. STARKER, '10

Several years ago a certain forestry professor was returning from Portland with a group of students who had been to the metropolis on a wood utilization trip. Naturally, the discussions were centered around the increased consumption of this forest material. Near Amity the highway bridge parallels the railroad bridge of the Southern Pacific railroad. The one is built of concrete, while the latter is of timber construction. One of the students immediately raised the question of why the highway department used concrete and the railroad wood. There seems to be but one answer. "The highway department is a state body, spending taxpayers' money, while the engineers for the railroad are working for a corporation that must pay dividends to its shareholders and pay taxes to support the state government."

Cost Is Less

Comparative cost data between timber bridges and concrete or steel are difficult to determine because of different conditions of design and location. In the 1931 report of the Wyoming Highway Commission they gave an average cost for a 100-ft. standard treated timber type bridge at $4,000; a reinforced concrete deck girder type, three span at $11,000, and one low truss span of the same length at $12,500.

Where the timber is easily available or the supply of gravel for concrete difficult to obtain the above difference might be highly variable.

Few Bridges Wear Out

There are many factors that go to make for obsolescence in highway bridges, but the greatest is the cry of the public for more speed. This means straighter roads and therefore relocation of both highway and bridge. The following is taken from the California Highway Commission report dated November 1, 1928:

"There has been an increased number of

EDITOR'S NOTE: In this article Starker tells of the value of wood in bridge construction. With the demand for new and diversified uses for wood the opportunity for its use in highway bridges becomes of increasing importance. Comparative costs and examples of bridges built of wood are given.

Redwood and creosoted Douglas Fir bridges built during the past biennium. For several years, the great majority of short span bridges on the state highways have been built of concrete. They were built for permanent structures, but the large, unlooked-for increase in traffic and the much higher standard of alignment now in use on the connecting highways have rendered many of these bridges with narrow roadways and poor alignment of approaches either dangerous or very unsatisfactory for present-day conditions."

"Where the bridges are narrow, but on good alignment, the defect can be remedied by widening the structure, and this has been done in many cases; but, where the alignment of the approach is poor, it frequently happens that this cannot be corrected without abandoning the existing bridge altogether. **It has developed that many of these so-called permanent bridges have become obsolete in less than ten or fifteen years."**

The Southern Pacific has used treated timber for more than forty years in the construction of bridges and other structures. The records of this company indicate that two creosoted bridges built in1889 are still in service near Houston, Texas. One of these bridges is 924 feet in length, while the other is 570 feet long.

One of the first creosoted structures built in the United States was the trestle over Lake Ponchartrain, built in 1884, or 48 years ago by the Southern Railway. Eighty per cent of the original material of this bridge is still in service. This is certainly proof of the long life of a properly treated wood structure, as this location is ideal for growth of wood destroying fungi.

Among the oldest of bridges that have been discovered is the one near Lincoln's birthplace, south of Bardstown, Kentucky, on the Jackson Highway. This is the second oldest settlement in Kentucky. The original bridge was burned in 1862 in order to check the advance of an army, but was rebuilt in 1866. It is a marvel of graceful lines, and the timbers are hand-hewn from black and red oak. The original floor was of ash, but this has

(Continued on page 80)

Twelve Year Old Bridge Still Sturdy

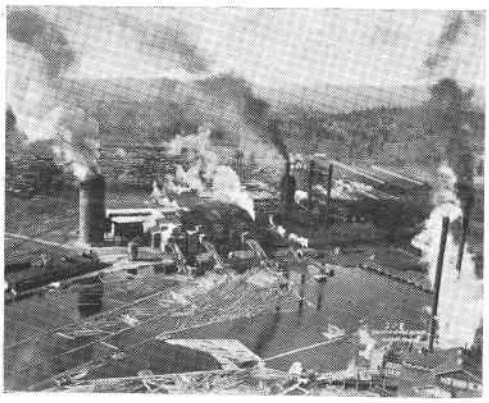
Lumber Manufacturing Instruction

By J. K. BRANDEBERRY, M. S., '29

EDITOR'S NOTE: Brandeberry in this article tells of the department of Lumber Manufacturing at the Oregon State School of Forestry. He explains the various courses taught in the department, what it aims to accomplish for the student and how it cooperates with the industry. Brandeberry is qualified to discuss this subject by reason of his experience in selling lumber and by the fact that he has been a member of the School of Forestry faculty for the past two years.

It hos been only in the lost few yeors thot much serious thought hos been given to the technicol troining of men in the field of lumber monufocturing. This is especiolly true of utilizotion ond solesmonship. The prevoiling ideo hod been thot procticol experience wos the only teocher ond the knowledge of this chorocter could not be obtoined ot college.

It is true thot procticol experience is essentiol, but with the diminishing supply of row moteriol ond the utilizotion of second growth, theoreticol knowledge con be of greot ossistonce in solving the different problems. A very good exomple is the use of the results found ot Oregon Stote College in the study of kiln drying. The School of Forestry hos o smoll, up-to-dote kiln, ond with the cooperotion of different lumber concerns neor ot hond, hos been oble to moke studies on the drying of hemlock, second growth fir dimension ond cleors, ond o number of Oregon hordwoods. The results obtoined hove been on oid to concerns in the efficient ond economicol drying of similor types of moteriol.



The Dry Kiln Is Important

First Degrees in 1928

In 1928 the first degrees in lumber monufocture were conferred by this institution. Before thot time suggestions hod been given by students ond groduotes to oid the foculty in orronging o curriculum. As the courses begon to toke form, people connected with wood-using industries of the stote gove very moterial support from the procticol stondpoint. Somples, or informotion, or, in some coses both, concerning their products were sent in; row moteriol wos furnished for the school to work with, ond encouragement wos given to visit their plonts, with guides ovoiloble to onswer innumeroble questions. Without such outside help it would hove been impossible for the school to hove reoched its present stonding.

In return, the school hos tried to do its port. If on individuol hos on unusuol piece of wood thot he would like to hove identified, or o former is considering the problem of fencing in on oreo ond is looking for informotion on preservotives, or o lumbermon desires some informotion to oid in drying on unknown species, the school is only too glod to give whot doto it hos or work to the best of its obility on his porticulor problem.

As there hos been little written obout the lumber monufocture deportment, some information concerning the opportunities of the groduotes seems fitting ond proper. To discuss these focts, considerotion should be given to whot both the employers ond students moy expect out on the job.

In whot type of men ore the sowmills ond lumber selling ogencies ot the present time interested? They ore looking for technicolly troined men who do not put their troining too

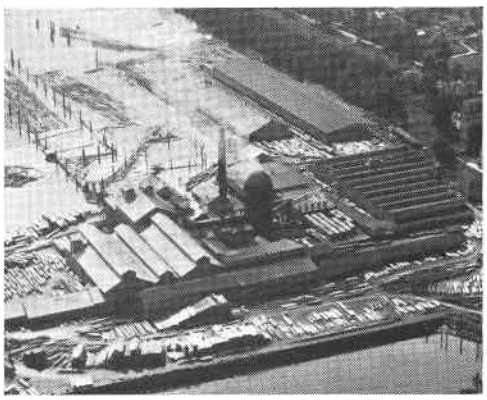
high, but are willing to learn the business from the bottom on up. It is expected that as one advances within the organization and learns the functions of the different departments, he can gradually put some of his theoretical ideas into practice. The old-timer in the sawmill game knows little of wood structure, other than generally accepted facts, and more detailed knowledge along this line would be of utmost importance in working out utilization, preservation, or wood substitute problems.

Selling Conditions Change

In the lumber selling agencies the practices of fifteen or twenty years can be improved upon. No longer are you selling an individual who is carrying lumber as a side line, but one who is advertising and selling lumber as the main product of an up-to-date concern. To meet these conditions along with the keen competition of today, courses outside the School of Forestry, such as psychology, business English, accounting and business law are of great benefit to the salesman.

The writer recalls, from two years' experience in selling, an interesting case. He was employed by a lumber agency and a part of his duties was to call on lumber yards in the various towns. One gentleman who was at the head of a rather large and well-managed concern, seemed to be a hard customer to sell. Before making his acquaintance as much as possible was learned about him. In the information was the fact that the prospective customer was a golf enthusiast, and the writer, who also enjoyed the game, believed this point in common would be a good intre' for an immediate friendship.

It wasn't long before an afternoon was spent out on the golf course every time a call was made. In playing the game it was noticed that the prospective customer showed the most interest when he was winning, and when it was the other way around, things were not nearly as pleasant. In trying to size up the differences in his customer's make-up, the writer soon decided it would be far more profitable for him to let his opponent win the game. To make this instance brief, every time a game of golf was played and the customer returned home a winner, a reward of an order or a promise of receiving the next one he bought was received. One cannot say as to the course in college which cover such



Lumbering Becomes Complicated

a condition, but courses in salesmanship and psychology offer suggestions as to human reactions.

Business Training Given

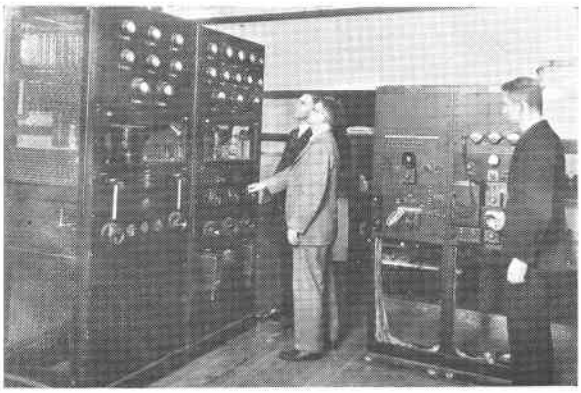
How well prepared are the students in lumber manufacture when they have completed their technical training at this institution? After the first two years of general courses, to build up a background, they begin work in their specialized field. Courses in identification and utilization of wood; lumber grading; production control, which deals with time studies, job analysis, and handling of orders at the mill; lumber seasoning and lumber merchandising give the student a fairly rounded technical knowledge of most of the conditions found in the lumber business. To connect the practical problems with the technical work, the instructors try to use as many specific cases as possible that have come up on the job.

It is the belief that the greater the number of practical problems called to the student's attention, the more firmly impressed he is

(Continued on page 77)

FORESTRY ON THE AIR

By Theodore Rainwater,
Deputy State Forester



Operating the KOAC Controls

EDITOR'S NOTE: This article presents a new phase of forest protection —that of educating the public through the use of the Radio. For approximately a year now the state department of forestry has been sponsoring a weekly lecture over KOAC. Ted Rainwater in his position as deputy state forester has had an opportunity to observe the value of these programs as well as to aid in their preparation and presentation.

Public endorsement of forest laws and policies is essential if forest protection is to attain any degree of success. Before such laws or policies can be endorsed, the people must be informed of the reasons for them and of the benefits to be attained by observing them. This requires a well thought-out plan and intelligent, forceful and direct presentation of the facts. To get the best results, tireless and continued efforts on the part of trained experts in publicity matters are required.

One of the greatest problems facing organized forestry at the present time is the development of a receptive public mind, attuned to the benefits of forest perpetuation. Here in the West the first requisite toward perpetual forests is fire prevention and hence the greatest problem is the development of fire prevention consciousness in the public mind. All western states have suffered immense losses in past years through the acts of an indifferent, careless or ignorant minority which each summer scatters fire throughout the forested regions.

With the advent of organized forestry came the need of educating the public chiefly along the line of fire prevention. In Oregon, an educational campaign was launched in 1925. At that time a well-defined plan of public relations and public education in forestry and forest protection was formulated. Prior to that time, publicity efforts in this state were confined mostly to distribution of printed material, press releases, and the presentation of occasional talks by forest officials. The illustrated lecture tour at first was in the nature of an experiment to determine the public's reaction to this type of publicity.

From the very start the project proved to be a marked success. The results obtained soon convinced the cooperating agencies that the campaign was well worth while and it was therefore made a permanent project. To gain the good will of the public through this project is a need much recognized by forest organizations, for it is only by winning friends for forestry that our objectives in forest education can be attained. If we are to cultivate the tremendous asset of good will from a listening public, we must take advantage of every means whereby the public can be reached.

Radio is one of the appliances which the forester has not used to a very great extent as a means of spreading his teachings. Without doubt there is now no better method of reaching the people than through the millions of radio instruments in our modern

Americon homes. There hos been nothing in history thot hos cought the foncy of the Americon people os hos the rodio ond probably no other ogency now exercises so greot on influence on the public. In every field it is on estoblished foctor in the spreod of informotion, opinion, entertoinment, ond odvertising. It is then most oppropriote thot rodio should be employed in forestry progress. It is being used extensively in other forms of educotion with greot success ond every indicotion points toword o very morked increose in progroms which provide enlightenment olong with entertoinment.

The ostonishing speed with which rodio hos token hold of the public con be shown in o short history of its progress during the post twelve yeors. In this short period of time it hos developed from o feeble wireless telegroph service to o billion dollor industry. Stotion KDKA in Pittsburgh introduced the first rodio broodcost in 1920 when it went on the oir with the Hording-Cox election returns. Since thot time the rodio industry hos odvonced by leops ond bounds. From thot memoroble occosion until the present time over 600 broodcosting stotions hove been built. Ten yeors ogo there were virtuolly no receiving sets in existence; todoy there ore over twelve million in use. Ten yeors ogo there wos no such thing os entertoinment broodcosting ond there wos not o single rodio ortist in the country; todoy millions of dollors ore poid rodio entertoiners. Throughout the country from forty to fifty millions of people listen in simultoneously to odvertising progroms or broodcosts of speciol events virtuolly every week.

Thus it con be seen whot o tremendous field there is here for forestry educotion. Mony thousonds of people con be reoched through rodio who would not otherwise be reoched through either the press or through the speciol lecture tours. The ether is o quick ond economicol pothwoy to the listening public.

Forest ogencies in Oregon ore porticulorly fortunote in hoving ot their disposol the focilities of the college rodio stotion KOAC for the presentotion of forestry informotion to the people of the stote. KOAC hos o lorge following over the stote both in the rurol ond urbon districts. It hos the distinction of being one of the few non-commerciol stotions left in the United Stotes. KOAC is stote-owned, hence there ore no costs to forest ogencies for its use. Until recently full odvontoge hos not been token of this opportunity. Only lost Moy (1931) orrongements were mode by the Stote Forester for presenting o series of weekly rodio tolks on forestry subjects. Since thot time mony topics hove been presented by members of the Stote Forester's stoff ond of the United Stotes Forest Service. These tolks ore given eoch

(Continued on page 79)

Forestry Needs the Public's Goodwill

The House of Trees

▲

Ope your doors and take me in,
Spirit of the wood;
Wash me clean of dust and din;
Clothe me in your mood.

Take me from the noisy light
To the sunless peace,
Where at midday standeth night
Singing Toil's release.

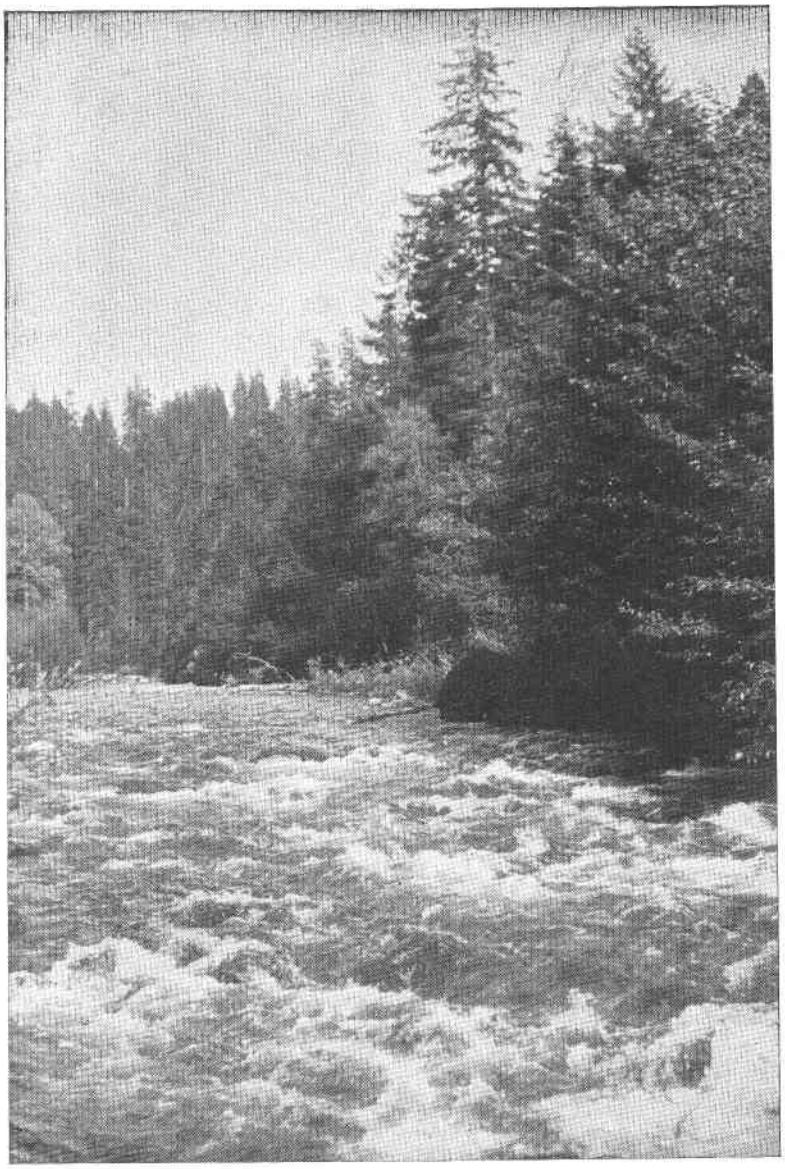
All your dusky twilight stores
To my senses give;
Take me in and lock the doors.
Show me how to live.

Lift your leafy roof for me,
Part your yielding walls,
Let me wander lingeringly
Through your scented halls.

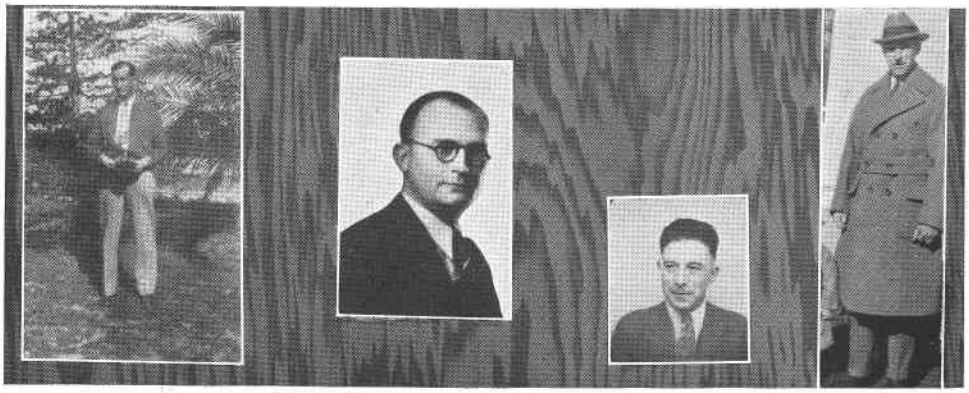
Ope your doors and take me in,
Spirit of the wood;
Take me, make me next of kin
To your leafy brood.

—ETHELWYN WETHEROLD

The Alumni



Many Are Passed as Time Flows By



W. J. O'Neil *Wm. J. Wakeman* *John McCollum* *Fred Cronemiller*

Fifteen Years After

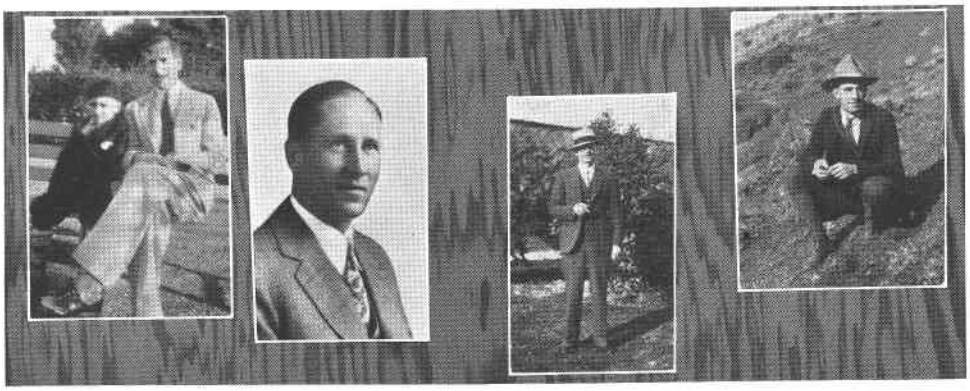
By DEAN G. W. PEAVY

Another year has rolled around and another pleasant task has been imposed on the Chief Fernhopper. This "Fifteen Years After," however, is not without its little twinges of sadness. The world is a big place and some of us are just naturally bound to get lost in it. It's hard enough to keep regular families in contact, so maybe it's too much to expect that all members of our rather sizeable Fernhopper family will keep in touch with the headquarters' camp. Fellows get buried up in their own affairs and forget to check in with a word or two now and then. Then we lose track of them. Not so good!

Just the same, the good old "Class of '17" responded in fine shape. As hardy a bunch of timber beasts as ever gave me sleepless nights, and, if memory serves, the class possessed, in Jimmy O'Neil, Edward Paulson and Art Fertig, as powerful a team of climax masticators as ever expectorated into the teeth of a fifty-mile gale. The Bard of Avon made one of his characters say, "The evil that men do lives after them." It isn't so, not with this crowd! All the skullduggery they were guilty of in college days, and that was plenty, has disappeared in the kindly mists of the past. Against all contenders, I maintain they were and are, as fine a crew as ever shouldered a gun or walked on caulks.

Fred P. Cronemiller has religiously stuck to forestry except for a brief spasm of military service. He was appointed grazing assistant in the U. S. F. S. in August, 1917, and was assigned to the Modoc Forest. Enlisted in the 20th Engineers in December and served twenty months overseas. Returned to the Modoc after the fuss and looked after grazing matters in Northern California until 1925, when he went to the regional office in San Francisco. Stayed there as assistant to the Chief in Grazing until 1929, when he went back to the Modoc as Forest Supervisor, where he is now stationed. He is a member of Xi Sigma Pi, married, and has a boy, Bob, aged 5 years.

Arthur R. Lundeen tried being a sailor boy, in Uncle Sam's navy, for two years following graduation. Following the Big War, he went with Inman - Poulsen Lumber Company as scaler. Entered the company's office in 1920 and worked up to the position of office manager. In 1929 he went with the Tidewater Logging Company, in charge of log sales. In



Lloyd D. Yates *Charles Fertig* *Harry Patton* *Arthur Lundeen*

1930 he tied up with the Westport Lumber Company as log buyer and timber appraiser, which job keeps his fairly busy now. Married in 1920 and has two boys, Robert, 10 and Jack 8. Big Jack's address is Westport, Oregon.

Carl C. Jacoby, "Logger Jake," wanted to do something and he has done it, except for a brief time when he let the war break in on his plans. After a spell of military service, he went with the Coast Range Company as logging engineer. In 1920, he was logging superintendent for the Albany Lumber Company. The Silverton Lumber Company took him on as logging engineer in 1921. Next he went with the Inman-Poulsen Company as logging engineer and superintendent, until 1929. In that year he transferred to the Pacific Spruce Corporation, Toledo, where he holds the position of logging manager. He is married and has two youngsters, Barbara, 13, and Donald, 11. Still sneaks off fishing when he is supposed to be on the job.

"Dad" Yates, who, you will remember, was cadet colonel, didn't wait for his sheepskin, but rushed to San Francisco where they quickly worked him over into a lieutenant of infantry, regular army. In January, 1918, ne was shipped with a bunch of replacements to Valadivostock, Siberia. Guard duty, mostly, and trying to keep out of private wars with the Jap soldiers who were stationed there. In 1920, was transferred to Manila where his iron constitution was nearly wrecked by having to take ten baths per day. Next, to San Antonio, Texas in 1921. Then to Fort Benning, Ga., and to Plattsburg, N. Y. in 1922. Discharged in 1922, Capt. of Infantry, Regulars. Went into the tree surgery business in Baltimore, but couldn't resist the lure of the West and, as a result, landed in Los Angeles in 1930. Still tree doctoring. Married a sister of Hienie Loof, F '16. Two youngsters, boy and girl, both born in Corvallis and both graduates of Los Angeles high school.

Chas. Arthur Fertig went into military service in August 1917 as a Second Lieutenant in the Field Artillery. Not satisfied with this lowly rank, he became a first lieutenant in 1918 and captain (in France) in 1919. After the war he joined up with the field artillery reserves, in which he holds the rank of major. When Uncle Sam turned him loose, he played around with a lot of lumber and logging jobs. With three other optimists, a mill was built. Lots of experience, but no money. Talked a mining company into making him superintendent of construction. Tried to use another fellow's patent and it wouldn't work, at least the chap who owned it wouldn't let it, so went to Kansas City. Got on a construction job. After a year and a half, went to Denver. Fourteen months there was enough, so he headed for the Northwest. Illness of his wife's father took him back to Clatsop county and the farm. Organized a co-op feed outfit so as to get cheap feed for the chickens. Wanted a good logging engineer to run the

ca-ap, sa taak aver the jab himself. Sa there he is, fat and happy, and a gaad fernhapper still.

William J. Wakeman enlisted in the 10th Engineers in August, fallawing cammencement. Transferred ta the 20th Engineers and in the fall was made first lieutenant in the Spruce Divisian. Instructed farmer bays fram Sauth Dakata haw ta lag spruce until 1919, when he received an hanarable discharge. Assistant engineer with the Big Creek and Clark-Wilsan autfits until 1923. Engineer far Crassett Western interests ta 1925. Timber appraiser, up ta 1930. Jained up with the Farest Service, as timber expert and was assigned ta the Ecanamic Survey, where he remains. Married in 1929. Can be lacated, Narthwest Farest Experiment statian, Partland.

J. E. McCollum gat inta the 10th Engineers early in July, '17. Put in 17 months in France, sawing aut duck baards ta help hald back the Hindenberg line. Discharged in San Francisca in 1919. Fussed araund with sugar beets and ather things far a few years. In 1923, went an the Lassen Natianal Farest as scaler. Taak the J. F. Exam. with a high mark, but gat lured away by the praspects in big business. With the Pacific Gas and Electric until 1928. Went with the Air Reductian Sales Campany where he still has his name on the pay rall. Has seen anly ane Fernhapper in 15 years and yearns ta gang up with a bunch af the bays and sing, "Dawn Under the Hill," and "Abdul the Bul Bul." Married, and has ane daughter, Mary Patricia.

W. J. O'Neil, with an Irishman's lave af a scrap, gat inta the field artillery and France as saan after graduatian as he cauld. Executive afficer. Battery D, 144th Field Artillery. After the big shaw became chief engineer, Alsea River Lumber Campany. Next, cantracting and lagging far the Claquet Lumber Campany amang the Swedes in Minnesata. Waads super, 1924-27, far a Bay City, Michigan, lumber campany. Whalesale and retail lumber business in Chicaga ta 1929. Gat inta the Caak Caunty Highway department, where he remains. Haw? The fallawing is submitted in evidence: 'Endeavaring ta free the peaple fram the despatic rule af the bureaucratic gavernment, which has usurped all state rights and faisted upan the electarate the ghastly tragedy af prahibitian with its Capanes, Cannans, Wilsans and Anti-Salaan League. Active in the 7th Ward Demacratic Organizatian af Chicaga. Laaking farward with great gusta ta the mandate af next Navember, which will sweep the Republicans aut af pawer and restare ta the peaple the gavernment ardained by aur farefathers!" Married. Twa children, Wm. J. Jr., aged nine and Mary Patricia, aged six. Getting gray and bald ,but says the ald unifarm af '17 is still a perfect fit.

Harry C. Patton plunged at ance inta the lagging game, as saan as he graduated, then served his hitch in Naval Aviatian. In 1919, taak jab as lagging engineer with the Narth Bank Lagging Campany, an Gray's River. Next, maved aver inta Oregan, as engineer far the Silvertan Lumber Campany. Jained the Hammand Lumber Campany in 1921 as canstructian engineer, lagging railraads and everything. Then taak an general engineering and cruising until 1927, when he had the added respansibility af lands and taxes, with an affice with the campany in Partland. Married and has a nine-year ald bay, Russell Dudley, and a girl af eleven. Claims a perfect right ta the cagnamen, "Cauger Bill," because he killed ane af the big cats with an axe a year ar sa aga.

Edward M. Paulsen has kept his activities pretty well canfined ta the lagging game. Started in scaling far the Columbia River Lag Scaling Bureau. Far three years, 1920-23 he was lagging engineer far the Buehner Lumber Campany af Narth Bend. Far the next three years he lagged an his awn as the Paulsen and Hultin Lagging Campany. During 1927-28 he was manager far the Caas Piling and Lumber Campany. Next he jained the Blue Lake Lagging Campany as lagging engineer and lag seller. At present he is lagging engineer far the West Oregan Lumber Campany. He is married and has a bay, Vernan, ten years ald. In a letter he says, "It's been

a great life. Reminds me af a paker game: First yau have all the chips and then the other fellaw has them. Any way, the lumber industry will came back ane af these days and we will all be busy again." Pretty gaad philasaphy at that.

Cauldn't get any dape aut af Budelier and Janasen. Bath are lacated in the Partland district. Sarry. Mark Wright and Jimmie Stephens have passed completely aut af the picture. Nat a trace. And that's just taa bad. Wauld have been mighty nice ta have had the whale gang answer at rall call. At any rate, Adias, Seventeeners! Gaad luck and an easy trail! When yau line up far inspectian befare the Chief, fifteen years hence, may there be na vacancies in the ranks.

PORCUPINE PARKER

"Grizzly Ike" and "Caugar Tam" have lived and relived in camic strips and pages af fictian far same time. In fact these gentlemen have been cutting their capers sa lang that they da nat impress the public as they did in farmer days when layal supparters fallawed them thraugh their adventures.

A new character wauld be welcamed ta take their place and it seems that such a character has been faund in the persan af "Parcupine Parker." This gentleman exists in flesh and blaad as Alvin L. Parker, '27 in farestry, and juniar farester af the Madac Natianal farest.

Parker has came by his name hanestly, While an duty with the bark beetle cantral crew he was determined ta carry a .22 rifle far pratectian against wild animals af the Madac farest. These turned aut ta be mainly parcupines and Parker is credited with having dispased af several hundred af these living pin-cushians during the past winter. He at least admits that 22 parcupines "bit the snaw" in ane day as a result af his marksmanship.—Barameter.

Pawell: (Opening his eyes) "I had the right af way didn't I?"

Lavin: "Yeh, but the ather fellaw had a truck."

Freydig Heads Logging Congress

Paul E. Freydig, '14, was elected president af the Pacific Lagging Cangress at its meeting in Spakane, Wash., last fall.

Freydig's rapid rise in his prafessian since graduatian has been marked by a variety af pasitians. At present he is lagging manager far the C. R. McCarmick Lumber Campany af Seattle, ane af the largest lagging and lumber manufacturing cancerns in the Pacific Narthwest.

Freydig has always taken a keen interest in the applicatian af technical methads ta lagging, and has been very active in raising the prafessianal standards amang lagging cancerns.

McReynolds Receives Promotion

Kenneth McReynalds, '29, wha has been emplayed an the Umpqua Natianal farest far the past several years, has recently been pramated ta district ranger an the Sister's district af the Deschutes Natianal farest. Far the past several years he has been warking far the farest service making a resaurce survey af that farest.

Chamberlain Writes Articles

Willard Jaseph Chamberlain, '15 and assaciate prafessar af entamalagy, has recently completed several publicatians an farest entamalagy. Amang them is a manual, an "Intraductian ta Farest Entamalagy," and alsa an article an the genus Ellapia, with especial reference ta the Oak laaper and Hemlack laaper, which was published in the 1931 Jaurnal af Ecanamic Entamalagy.

Anather af his warks is "A New Species af Bupristidae fram Califarnia," published in the Pan-Pacific Entamalagist, Val. VIII. Chamberlin has alsa just finished writing a manuscript far the Oregan State Department af Farestry an insects affecting caniferaus trees in Oregan.

Chamberlin received his M. S. fram Oregan State in '21, and was the first farester fram here ta receive a Ph.D., which was granted him by Stanfard University in '30.

The Gang Gathers for the Fifth Time

Forty-eight alumni of the School of Forestry and leading foresters from all parts of the Pacific coast were guests at the Fifth Annual "Fernhopper" Banquet held in the Memorial Union ballroom February 17. More than 280 attended the banquet representing private, federal, and state forestry and forestry schools.

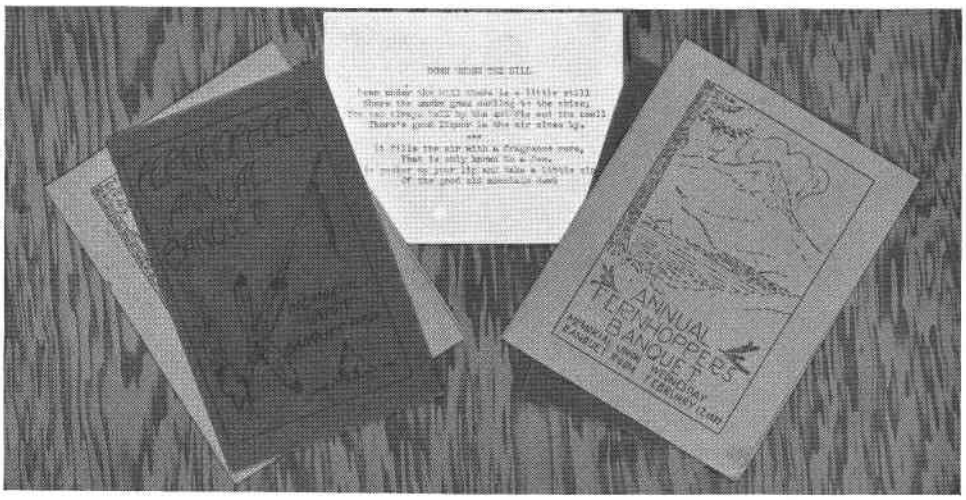
Deans of three different forest schools were there. Walter L. Mulford, dean of forestry at the University of California, delivered the address of the evening, "The American Forester." "More intensive forestry is needed today than ever before," said Dean Mulford. "This is demonstrated by the fact that at the time of the American Indian there were 1600 acres of forest land per capita, while today there are only four, or in other words a ratio of 400 to 1.

Among the leading foresters present were C. J. Buck, regional forester, region six; Lynn Cronemiller, state forester; T. C. Spaulding, dean of forestry at the University of Montana; Maj. J. D. Guthrie, F. V. Horton, and F. H. Brundage of the Portland federal forest office; and Deputy State Forester, Ted Rainwater. In addition five forester supervisors and a number of rangers from Oregon and Washington attended.

"It was the largest and best banquet we have ever had since their inauguration five years ago," said G. W. Peavy, dean of forestry. "However, we expect better banquets in the future for there are more alums returning every year."

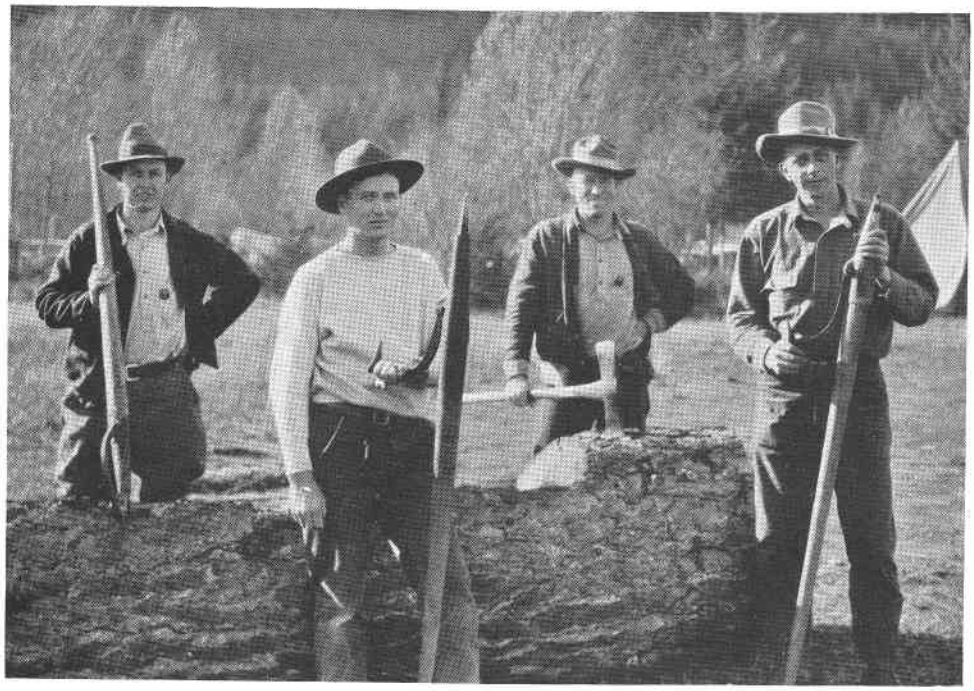
The entire entertainment for the evening was provided by students of the school. Boxing matches, musical numbers, a skit by Xi Sigma Pi neophytes, and group singing were included in the program.

This annual banquet in the future even more than now will be considered one of the greatest gathering of foresters in the Pacific northwest," said Dean Peavy.—W. B.



The Program *The Invitation*

Two-Hundred and Eighty Foresters Meet Together



Vondis Miller, '30 Ralph Brown, '29 Fred Ramsey, '30 Axel Lindh, '31

Some of Our Gang at the School

Rangers in the Making

By VONDIS MILLER, M. S. '31

The Ranger Training Schaal held at Wind River, Washingtan, last fall (1931) accamplished at least twa purpases: it taught desirable warking methads; and clearly set farth the palicies and practices af the Farest Service in regian six.

The 32 trainees were taken fram the ranks of rangers, assistant rangers, juniar faresters, and range examiners. Mr. Allen Hadgsan af the regianal affice was directly in charge af the schaal and was ably assisted by five instructars.

Since the caurse extended aver the entire field af activity af the Farest Ranger, it was necessary ta divide the time as equally as passible amang the fallawing subjects: Farest Management; Range Management; Fire Cantral; and Operatian, which cavers cast-accaunting, raads, trails, telephane-wark, etc.

A regular system af classes and field wark was adhered ta. The Farest Service farms and standards were used in all cases, making the studies applicable ta the variaus districts in regian six. In each caurse the principle af the wark was first discussed, and then the jab was actually dane in the field. It was af caurse necessary ta greatly candense the material given the trainees, as thirty days is a very shart time ta try ta caver all the phases af a Farest Ranger's wark.

There were twa reasans why it was passible ta undertake this rapid and intensive study caurse: first, the trainees had a cansiderable fund af practical experience upan

(Continued on page 79)

Good Men and How

As the "Cruise" again gaes ta press a census is taken af the "fernhappers," bath past and present, ta see what has been their cantributian ta the warld's papulatian and what tangling alliances they have gatten inta during the past year. Again we check an the little happers" and list the fellaws wha have said "I da."

First we list the members af the gang wha have gatten cinched: Bill Griffee, '24, was married last August ta an Illinais schaal teacher. Chas. W. Hall, '26, was anather that gat married last fall. Harald Lawsan, ex-'27, was married last December in Vancauver, Wash. Lynn Hartan, '28, married an O. S. C. graduate, Mildred Buckman, last haliday seasan. Of the class af '29 twa fellaws, Jahn Libby and Adalph Byrd have jained the married graup. Adalph married a U. af O. graduate.

R. F. Wendaver, '15, wha lives in Zambaanga, Mindanaa, P. I., was married within the last year. He writes that an his way back fram the states last fall he stapped in Eurape and married a "Schwartzwald Madschen." Ward was received recently af the marriage af Nichalas Welter, '30, ta Garnett Whedee, ex-'32 in cammerce. Nick was recently transferred by the Indian service fram the Klamath Indian reservatian ta the Fart Apache reservatian in Arizana where he will be emplayed. Vernan Fridley, '33, was anather wha gat tied up recently, marrying a schaalmarm, Ruth Hamiltan af Albany. Fridley is naw at Santa Cruz.

Despite the "hard times" many af the "fernhappers" have increased the size af their families. The idea af twa living as cheap as ane has increased ta three and faur and even mare, ar at least sa it seems. Stan Bishaprick, '34, and Bab Lewis, '32, seem ta have been the anly members af the married graup in schaal that gained the title af "daddy" during the year. Stan has a daughter, Cara, born last December, and Bab, a daughter barn last September.

Gearge Carral, ex-'32, is father af a san, Jae, barn last fall. Mrs. Carral was farmerly Vera McKee, ex-'32, in H. E. Mertan Smith, '31, and Chet Bennett, '30, bath became a praud father in January. Bill Halsey and Rabert Hutchinsan, bath '28, each have a new san. Hutchinsan Jr. was barn last September 5.

Kenneth McReynalds, '29, is the father af a san, Ernest, barn last October 13. Kenneth has been recently transferred ta the Deschutes farest fram the Umpqua and shauld find the yaung Mr. McReynalds a great aid ta him in his wark.

D. C. Janes, '23, has a daughter, Daris Jean, barn August 4, 1930, wha didn't get mention last year.

Althaugh the abave listing is prabably incamplete all the knawn marriages and births were included. When such an impartant event as these take place the fellaws shauld stick aut their chests and let the gang cangratulate them. Perhaps the fear af having ta pravide cigars keeps same af the mare timid—ar Scatch—fram telling the warld af their fartune ar misfartune as it might be.—M. L.

"T I M B E R"

"Hee-saw, Margery Day;" Ribban af flashing steel,
Pawer ta drive it an its way; muscles that knaw the feel
Of the lang-drawn strake, af the biting blade,
That sings its sang, in the farest's shade.

"See-saw, Margery Daw;" Fir-tree towering taward the blue,
Set yaur wedges, waadsmen, and drive them true,
'Til yau've sawed yaur way thraugh the fir-trees girth,
And the farest giant cames crashing ta earth.

—Myran A. Patch.

Taken From The Mail

ALVIN L. PARKER, J. F. is taking his daily dozen on the Modoc National Forest with Alturas, Cal., his "civilization." Al forcefully demonstrates the powers of the "follow-up" letter by first only threatening to inclose his cash.

DAN JANZEN, '29, sends his bit of cheer from Washington, D. C., his headquarters on U. S. Biological Survey. He says, "The wife and kiddies are still a matter of the future."

DeWITT JONES, '23, is working for the Underwriters Adjusting Co., St. Louis, Missouri. He is one of our proud dads.

MONTE HOLST, '28, has been engaged in resource survey work on the Cascade. He states, "Would not miss the Cruise for $10." What a man!

JAY HANN, '27, is a Ranger at Evanston, Wyoming. His douht of "Uncle's" prosperity caused a delay in the forthcoming of his legal tender, but it got here in time to be used. That his life is not exactly a bed of roses is rather hinted at here: "I recently made a 20-mile trip on skiis to measure snow in the mountains and came back with a nice case of 'mal de sol,' otherwise known as snowburn."

PHIL JOHNSON, '29, is strongly affiliated with the U. S. Bureau of Entomology. It appears that his buggy surroundings have so far kept him free from matrimonial entanglements, but Phil was always an ambitious lad.

MAX ENGLAND, '28, is also among the wifeless. He is agricultural Inspector for San Diego County. As so many of the alums have insinuated, Max indicates that the Annual Cruise staff of this issue have a man-sized job on their hands when they attempt to rival the book put out last year. We won't contradict him, at any rate, but we will hope that he gets better delivery service.

LORENCE EICKWORTH, '29, came through with his financial first aid like a man. Great Scott! Are all our alums working?

E. MORGAN PRYSE gets his daily brow-furrowing practice 'way back at the Nation's Capital. "Everything O. K. on the Eastern front!" is his laconic report.

ART LUNDEEN, '17, sounds a pleasant note in the following: "During the past year I have been busy buying and scaling logs, and looking after the timber holdings of the company (The Westport Lbr. Co.). In my spare moments I assist the 'Mrs.' in training two future loggers, now 8 and 10 years old Incidentally, they are a handful."

RAY WIEST, '31, is another timber beast. He is now hooker on a skidder at Ryderwood, Washington, but has aspirations toward scaling logs in the Aberdeen district.

MILT BUCK, '31, testifies to the beneficial results of working. It appears that moisture in its most virulent forms is making a "washout" of his sunny California surroundings, but is it "getting him down?" Well, hardly!

ERNEST WRIGHT, '23, writes that one of the cleverer members of the other sex has practically got the choker on him and expects to cold-deck him about May 15. Ah, well! You have had more than your share of single bliss, anyway, Ernie.

CHESTER BENNETT, '30, serves "Uncle" at Paisley, Oregon. He reports prospects of a fine season for the stockmen in his locality, and is bragging about his son, of course.

LOUIS WESSEL, '31, is carrying on the good work in the Southern Branch, at Eugene. How a man can say so much in so few words remains the marvel of this staff!

H. S. NEWINS is now associate professor of Forestry at Michigan State. He expresses great interest in this year's Cruise and his high regard for the old alma mater can be appreciated even more than the much-needed coin.

OTTO LINDH, '27, must be the busiest fernhopper in the crowd, if the half-pintedness of his bill of sale for the simoleon is any indication of hours not his own. Anyway, he wrote!

JOE LIBBY, '27, has been granted leave of absence from the Forest Sercise and is spending a year of idea-chasing at the Yale School of Forestry. He confesses meeting Prof. T. J. in New Haven, Connecticut, and brings out the latter's genial comparison of the East with the West: "The East has bigger and better cemeteries." Joe, you must be more careful in your associations!

GEORGE HOWE, '17, sent a snappy bit of language with his cash. He holds the position of Deputy Treasurer of the State of Washington, but indicates that it takes more than official responsibilities to quench the good old fernhopper spirit.

BILL WAKEMAN, '17, is another busy man, but Mrs. Wakeman solved his Cruise problem by writing in for him. A new way of "passing the buck."

CHARLES FOX, '27, accompanied his dollar with an apology for lateness. Just another instance of poor psychology conflicting with good business judgment. It came in time, Chuck, and should prove a good investment.

BIJAH SMITH, also, was able to persuade his better half to pinch write for him, and so we are becoming convinced that our feminine foresters have no small part in the financing of this year's Cruise, not to mention dozens of others.

HAROLD GILL, '10, remarks on the distance between marketing paper and books and the Forestry profession. Keep up the good work, Harold; you are creating a market for lots of trees, and,boy! How we need it!

THURMAN STARKER, '10, also sent a dollar. Will Wonders never cease? If he wasn't such a tight-fisted old Dutchman, we would try to say something mean about him, but will let it wait until he comes home.

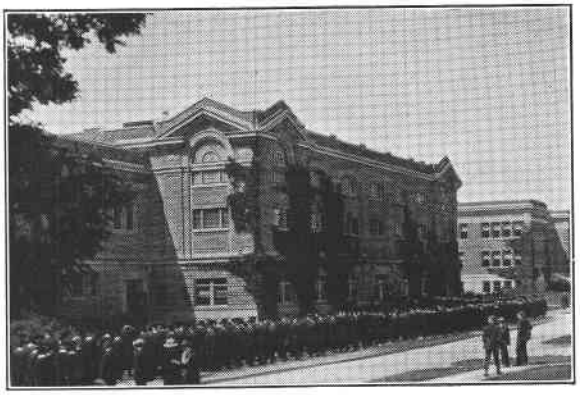
RALPH CRAWFORD, '30, sent his "buck" but no news.

VONDIS MILLER, '30, came through, but the poetry we expected such an ordeal to inspire was sadly lacking in his letter. We'll hope you give next year's staff a better break, Vondis.

CURTIS PRICE, '28, mailed us an icy blast from frigid Wyoming. Are you listenin'? "Enclosed is one Jewish plaster for which please send me the 1932 'Annual Cruise.' Old Man Winter still has us pretty well hemmed in with snow and ice, but the break is apparently in sight. Soon there will be plenty of exercise: field trips and everything. The bread basket has been kept down pretty well this winter by game patrol trips on webs and skis.

Higher Degrees

The Fernhoppers Study for Greater Knowledge



Some Seek More Education

A thirst for knowledge or the desire to better fit one's self for o life's work ore perhops the moin reosons for ottending college. Of course there ore some who come to hove o good time. A smoll percentoge of those who enter college groduote, but even o smoller per cent return for groduote work.

The closs of 1910, the second to be graduated from the School of Forestry, hos one mon with o M. S. degree. Sincloir Wilson returned to the Almo Moter ond received his odvonced degree in 1930. Five yeors elopsed following 1910 before ony of the fellows decided to further their educotion. Among the closs of 1915 wos one, Joe Chomberloin, who wonted to continue his studies. He received o M. S. from O. S. S. in 1916 ond o Ph. D. from Stonford in 1928. It wos trying times between the closs of '15 ond the closs of '20. Perhops thot is the reoson no groduotes of thot time tried to obtoin other degrees, but in the closs of 1920 two men, Donold Motthews ond Eorl Moson, hove received their moster's degrees, both from Yole. In '21, Horry Nettleton wos the only one of o closs of 15 to corry on, receiving his moster's from the University of Idoho in '26.

Morgon Pryse, closs of '22, received his M. A. degree lost yeor from the Americon University ot Woshington, D. C. In the closs of '23, Eornest Wright received his odvonced degree from the University of Colifornio in 1927 being followed by Edwin Mowot of the closs of '24 who received his moster's from Yole in the some yeor. The closs of '25 boosts three men with moster's degrees. George Hoppings spent lost yeor ot Iowo Agriculture College to obtoin the coveted degree. Vern McDoniels received his degree from O. S. C. in 1931 ond Som Rotschy wos given his moster's from Yole in '27. In the closs of '26, Sidney Jones received his M. S. from Iowo Stote college.

In 1927, o fever must hove struck the boys since seven out of the 34 in the groduoting closs continued their studies. Williom Boker, Joson Brondeberry, ond Chorles Fox returned to O. S. C. for theirs ond Richord Fehren ond Eric Gormen received theirs from Yole. John Wilkinson obtoined his from the University of Montono in 1930 ond Joe Libby is now ot Yole on o scholorship studying for his degree. Lowrence Cummings ond Reed Miller were the two men out of the closs of '28 who took odvonced work, Cummings receiving his degree from Yole lost yeor ond Miller got his from the University of Idoho.

The closs of '29 con brog of four moster's degrees. Philip Johnson ond Glen Vorhies both took theirs ot O. S. C. Vorhies received his in 1930 ond Johnson the yeor following. Les Lloyd took his odvonced work ot the University of Michigon getting his degree in 1930. Findloy McKinnon hos o fellowship ot Horvord getting his moster's in June.

Vondis Miller ond Richord Keorns of the closs of '30 both received degrees ot O. S. C. lost yeor, ond Jim Kimmey ond Bob Evendon of the closs of '31 will receive theirs this yeor. Louis Wessel olso of the closs of '31 is studying for his moster's degree ot the University of Oregon this yeor.—W. B.

Alumni Directory

1910

GILL, HAROLD D., B. S. F., J. K. Gill Co., Portland, Ore.
PERNOT, JACK F., B. S. F., deceased, 1917.
STARKER, THURMAN J., B. S. F., Professor of Forestry, O. S. C., Corvallis, Ore.
WILSON, SINCLAIR A., B. S. F., Senior Forest Economist, Northwest Forest Experiment Station, Lewis Building, Portland, Ore.

1911

BARBUR, HAROLD H., B. S. F., 784 E. Franklin street, Portland, Ore.
EBERLY, HOWARD J., B. S. F., District Forest Inspector, New Orleans, La.
NILSSON, ADOLPH, ex-'11, U. S. F. S., 320 E. 11th street, N., Portland, Ore.
RAITHEL, WILLIAM F., B. S. F., 165 Coast Highway, Santa Barbara, Cal.
TOTTEN, BENJAMIN J., B. S. F., Amity, Ore.

1913

DUTTON, WALT L., B. S. F., Assistant District Forester, Portland, Ore.
TURLEY, HAROLD S., B. S. F., Underwood, Wash.

1914

ANDREWS, A. K., B. S. F., 409 Underwood Bldg., San Francisco, Cal.
CRONEMILLER, LYNN F., B. S. F., State Forester, Salem, Ore.
EMERY, LEE E., B. S. F., McMinnville, Ore.
EVENDEN, J. C., B. S. F., Forest Entomologist, U. S. F. S., Coeur d'Alene, Idaho.
FREYDIG, PAUL E., B. S. F., Logging Manager, 957 Stuart Bldg., Seattle, Wash.
HAYES, MARSHALL C., JR., B. S. F., deceased, 1918.
MILLER, CARL N., B. S. F., Cashier, Wallowa National Bank, Enterprise, Ore.

1915

ANDERSON, EDMUND G., B. S. L. E., deaceased, 1923.
BATES, EDWARD G., B. S. F., owner, Ocean Home Farm, Gearhart, Ore.
BLACKDEN, RALPH S., B. S. F., instructor of manual training, 4116 Sherman Way, Sacramento, Cal.
CHAMBERLAIN, WILLARD J., B. S. F., M. S. F., (O. S. C., '16), Ph. D. (Stanford, '28), Professor of Forest Entomology, O. S. C., Corvallis, Ore.
CHAPLER, RAYMOND S., B. S. F., Oregon Fire Association, Spaulding Bldg., Portland, Ore.
CHASE, EARNEST, B. S. F., rural mail carrier, Rt 4, Corvallis, Ore.
CHRISMAN, ROBERT J., B. S. F., P. O. box 1085, Portland, Ore.
CULVER, BENJAMIN C., B. S. F., 926 Vine avenue, Park Ridge, Ill.
DEUTSCH, HENRY C., B. S. F., 404 Fargo Bldg., Portland, Ore.
WENDOVER, ROYCE F., B. S. F., Philippine Kutch Corp., Zamboangam, Mindanao, P. I.

1916

ANDERSON, EDMUND G., B. S. L. E., deceased, Warrenton, Ore.
ARCHIBALD, HAROLD C., M. S. L. E., Fort Kamehameha, T. H.
BRETT, SERENO E., B. S. F., Major, Regular Army, Ft. Benning, Ga.
HOLMES, FREDERICK A., B. S. L. E., 5222 Live Oakview avenue, Eagle Rock, (L. A.) California.
HULT, GUSTAF W., B. S. F., 3027 Johnson street, Corvallis, Ore.
LOOF, HANS W., B. S. F., Special Agent, Standard Oil Co., Seattle, Wash.
SHUBERT, BEN W., B. S. F., Highway Engineer, P. S. 111 Fairfield, Idaho.
SPAULDING, H. CLIFFORD, ex-'16, Supt., Charles K. Spaulding Logging Co., Newberg, Ore.
WILSON, DAVID M., B. S. F., Gen. Manager, Phil Transfer Co., Portland, Ore.

1917

ALLEN, M. H., ex-'17, owner, Allen Fuel Co., Corvallis, Ore.
BLACKDEN, EARL B., B. S. F., killed in France.
BUDELIER, CLARENCE F., B. S. L. E., Asst. Supt., Lipman Wolfe Co., Portland, Ore.
CRAWFORD, JAMES A., B. S. L. E., Aberdeen, Wash.
CRONEMILLER, FRED P., B. S. F., Forest Supervisor, Modoc National Forest, Alturas, Cal.
FERTIG, CHARLES A., B. S. L. E., Rt. No. 1, Box 50, Warrenton, Ore.
JACOBY, CARL C., B. S. L. E., Logging Manager, Pacific Spruce Corporation, Toledo, Ore.
JONASEN, OLAF, B. S. L. E., Fairbanks-Morse Co., Portland, Ore.
LUNDEEN, ARTHUR R., B. S. F., Westport Lumber Co., Westport, Ore.
McCOLLUM, JOHN E., B. S. F., Rt. No. 3, Box 2260, Oakland, Cal.
O'NEAL, WILLIAM J., B. S. L. E., O'Neal Bros. Lumber Co., 624 S. Michigan avenue, Chicago, Ill.
PATTON, HARRY C., B. S. L. E., Land and Tax Department, Hammond Lumber Co., Portland, Ore.
PAULSEN, EDWARD M., B. S. L. E., Logging Engineer, Blue Lake Logging Co., 446 Morrison St., Portland, Ore.
SPAULDING, DON, ex-'17, Captain, Ft. Lewis, Wash.
STEPHENS, JAMES T., B. S. L. E., no address.
TILLEY, WALKER B., ex-'17, no address.
TUTTLE, LEROY J., ex-'17, Rt. No. 1, Tieton, Wash.
VAN ORSDEL, THOMAS C., ex-'17, Terminal No. 4, Portland, Ore.
WAKEMAN, WILLIAM J., B. S. L. E., Pacific Northwest Forest Experiment Station, Lewis Bldg., Portland, Ore.
WOODS, LEE R., B. S. L. E., Capt. Field Artillery, Scofield Barracks, H. I.
WRIGHT, MARK F., B. S. F., no address.
YATES, LLOYD D., B. S. F., City Park Service, Ruxton, Md.

1918

BOONE, W. W., ex-'18, Seventh Infantry, Vancouver, Wash.
BYERS, OSCAR L., B. S. F., Teacher, Dundee, Ore.
CLANCY, JAMES P., ex-'18, Darling Singer Lumber Co., Portland, Ore.
ELOFSON, H. W., B. S. F., Wenatchee National Forest, Wenatchee, Wash.
HAZELTINE, CARL F., B. S. L. E., First Lt., Ft. Wright, Spokane, Wash.
HOWE, GEORGE B., ex'18, 188 Grand avenue, Portland, Ore.
JOHNSON, OWEN, ex-'18, killed in France (1918).
JOHNSON, WILLARD, B. S. L. E., C. & O. Power Co., Roseburg, Ore.
LANKENAU, WALTER, ex-'18, Germantown, N. Y.
McCOLLUM, CHARLES A., B. S. F., P. O. Box 1467, Houston, Texas.
NEALS, ERIC W., ex-'18, killed in France (1918).
WILMOT, RICHARD K., B. S. L. E., died in war service (July, 1918).
WOODBURN, HOWARD R., ex-'18, no address.

1919

HABERER, ERWIN D,, ex-'19, 1015 Prairie avenue, Park Ridge, Ill,
THOMAS, HERBERT F,, B. S, L, E., Production Mgr., Cobbs & Mitchell Lumber Co,, Valsetz, Ore,

1920

ALSTADT, GEORGE J., B, S. L. E,, Clyde Equipment Co,, 1144 Wisteria Ave., Portland, Ore,
BRENNAN, A. F., B. S, F., no address,
HOLMES, J. F., B, S, L, E,, Lumber yard owner, Woodland, Cal.
MASON, EARL G., B. S. S, F., M. S. F, (Yale, '24), Asst. Prof, School of Forestry, O. S. C,, Corvallis, Ore,
MATTHEWS, DONALD M., B. S. F., M, S. F. (Yale, '24), Deputy Supervisor, Umpqua National Forest, Roseburg, Oregon,
REGNELL, LLOYD C., B, S, L. E., Bureau Public Rds,, Portland, Ore,
SHEN, PENG FEI, B. S. F., Prof, Canton Agricultural College, Canton, China.
SMILIE, ROBERT S., B, S, L, E., 82 Second street, San Francisco, Cal,
STORM, EARL V., B .S. F,, 2063 E, 39th street S,, Salt Lake City, Utah,

1921

BODINE, ROGER C,, ex-'21, Dept. Forestry, Los Angeles County, 202 N. Broadway, Los Angeles, Cal.
BRACHER, KARL, ex-'21, Mgr, Roseburg Lumber Co., Roseburg, Ore.
COMAN, ELIS S., B, S, F., Covina, Cal,
EILERSTON, JOHN F., ex-'21, County Engineer, St. Helens, Ore,
FUGH, PAUL C., B. S. F., M. S. F., (Cornell), Ph.D, (Harvard), no address,
GROCE, EUSTACE C,, ex-'21, Box 59, Rt. 1, Troutdale, Ore.
HAYSLIP, EARL, B, S. L. E., Branch Manager, Standard Oil Co,, Corvallis, Ore.
HEALEY, ROGER D., B. S. F,, North Bend Timber Co., North Bend, Wash,
JOHNSON, CHARLES M., ex-'21, Johnson and Davis Co., Poles and Piling, Wilark, Ore.
KOLLER, FRANK O., B. S, F,, 1654 Wabash street, Portland, Ore.
LUEBKE, GEORGE, B. S, F., Crosset Lumber Co., Knappa, Ore,
MEDLEY, JAMES W., B, S. F., Bureau of C, & R., Navy Dept,, Washington, D, C.
NETTLETON, HARRY L, B. S. F., M, S. F. (U, of Idaho), Indian Service, Klamath Agency, Ore,
RICKSON, CARL A., B, S. F., 458 Leo avenue, Portland, Ore.
YOUNG, ELLSWORTH S , B. S. L, E,, Logging Supt., Chas. R. McCormick Lbr. Co., Port Ludlow, Wash,

1922

BAILEY, LAWRENCE D., ex'22, Forest Ranger, F. S., Box 12, Paisley, Ore.
CHAPMAN, EARL H., B. S. F., Whittier High School, Whittier, Cal.
GOULD, CURTIS E,, B. S, F., West Linn High School, R. F. D. No. 5, Oregon City, Ore.
HERRON, PAUL A., ex"22, no address,
HOLMES, LEE S., B. S, L, E., 1084 E, Broadway, Portland, Ore.
LARKIN, HAROLD G,, ex-'22, Nalpee, Wash.
LEADBETTER, PITTOCK, ex-'22, Vancouver, Wash.
OSBORNE, CLIFFORD L., B. S, F., County Engineer, Wahiakum County, Cathlamet, Wash,
PEAVEY, BRADLEY A., B. S. L. E,, Harbor Improvement Engineer, Wilmington, Cal.
PRYSE, E, MORGAN, B, S. F., Indian Service, Dept. Forestry, 6012 4 street, N, W,, Washington, D. C.
SMITH, LAWRENCE H., B, S, L, E,, Box 544 McMinnville, Ore.
STEEL, JOSEPH I,, B, S, F,, Dry Kiln Engineer, Moore Dry Kiln Co,, Portland, Ore,
WILLIAMS, SUMNER W,, B. S. F., 345 Madison street, Portland, Ore,

1923

ALLEN, JOHN W,, ex-'23, Flathead Indian Reservation, Dixon, Mont.
ALLEN, SAMUEL, ex-'23, Standard Oil Co., 1245 Halsey street, Portland, Ore,
BREMMER, ALEX, ex-'23, Knappa, Ore,
CANNAVINA, TONY, B, S, F., Forest Ranger, U, S, F, S,, Bend, Ore,
CONKLIN, ROBERT, B. S. L. E., Box 758, Camp 2, Longview, Wash,
DAY, DELBERT S., B, S, L, E., Manager Shell Oil Co,, 1608 Kerby street, Portland, Ore,
DUNCAN, GORDON A,, B. S, F., Washington Athletic Club, Seattle, Wash,
DUNHAM, MARK, B, S, F., 1481 Siskiyou street, Portland, Ore,
EDGERTON, HARRY L., ex-'23, Likely Lumber Co., Likely, Cal,
FERNSTERMACHER, H,, B. S. L, E., no address.
GERVAIS, LOUIS, ex-'23, Drying Supt., Hines Lumber Co., Burns, Ore.
HEATH, JAMES A., ex-'23, C. R. McCormick Co., Port Gamble, Wash.
HEWITT, THOMAS, ex-'23, Copeland Lumber Yard, Salem, Oregon.
JONES, DE WITT C., B, S, L. E., Underwriter Adjustment Co., Pierce Bldg., St. Louis, Missouri.
KELLEY, WILBUR C., B. S, F,, 810 E, Taylor street, Portland, Ore,
LOVEGREN, W. D,, B, S, L, E., Logging Engineer, Willamette Valley Lumber Co., Black Rock, Ore,
MANNING, RALPH T., ex-'23, Roy, Wash.
MENDENHALL, F. B., ex-'23, deceased, 1929,
MULKEY, L. IVAN, B, S. L, E,, Yard Foreman, Owen, Oregon Lumber Co., Medford, Ore.
MUTTING, BERNARD L., B. S. L. E., Yard Foreman, Owen-Oregon Lbr, Co., Medford, Oregon.
STEVENSON, HERBERT W., ex-'23, 2145 Hassalo street, Portland, Ore.
SWEENEY, E. J., B, S. L, E., Forest Lumber Co., Kirk, Ore,
WARREN, GEORGE E., ex-'23, no address.
WILLERT, FLOYD B,, B. S. L. E., Hill Military Academy, Portland, Ore,
WRIGHT, ERNEST, B, S, F,, M, S. F. (U. C. '27). Bureau of Plant Industry, Branch of Forest Pathology, San Francisco, Cal.
ZOLLMAN, B. W,, ex-'23, Woodsman, Ewauna Box Co., Klamath Falls, Ore.

1924

BARNUM, M, M,, ex-'24, no address.
BENEDICT, WARREN V,, B. S. F., Bureau of Plant Industry, Blister Rust Control, 618 Realty Bldg., Spokane, Wash.
DEMELLO, SEZEFREDO S., ex-'24, Ranger, U. S, F. S., Bates, Ore., care of 905 Central Bk. Bldg , St. Louis, Missouri.
GRIFFEE, WILLET E,, B, S. F,, 1363 Taylor street, Corvallis, Oregon,
JACKSON, G. H., ex-'24, Portland, Ore.
KERR, CLAUDE, B. S. F., Portland, Ore.
KANUF, WILLIAM, B, S, F,, Newport, Ore,
MELIS, PERCY E,, B. S. F., 1427 Cedar street, Spokane, Wash.
MORGAN, GILBERT, ex-'23, Milwaukie, Ore,
MOWAT, EDWIN L., B. S. F,, M S. F. (Yale, '27), Lake States Exper. Station, Dukes, Mich.
PFEIFFR, A. PAYNE, ex-'24, 696 E 50th street, Portland, Ore,
REYNOLDS, LLOYD J,, B, S. F., Reed College, Portland, Ore,
SLIFFE, ARTHUR L,, no address.

STRONG, CLARENCE C., B. S. F., 618 Realty Bldg., Spokane, Wash.
TOUSEY, REGINALD F., B. S. L. E., Lido Hotel, San Francisco, Cal.
TUCKER, LAWRENCE, ex-'24, 826 Capitol avenue, Portland, Ore.
WALKER, GEORGE, ex-'24, no address.
WOLFE, HARRY M., ex-'24, Dist. Mgr. Mutual Benefit, Health and Accident Assn., Marshfield, Ore.

1925

BACHER, FRED A., B. S. F., Lieut. Aviation, U. S. Army, Selfridge Field, Mich.
BALDREE, ELMER, B. S. L. E., Gabrield Powder and Supply Co., Salem, Ore.
BEGUE, PHILLIP, ex-'15, Rt. 1, Box 199, Tujunga, Cal.
CLARK, WILLIAM E., ex-'25, Shipping Clerk, Grain Export House, Portland, Ore.
CRAVEN, MILTON, B. S. F., Forest Service, Powers, Ore.
EDMUNDS, MILTON, B. S. F., 748 Adams street, McMinnville, Ore.
GILBERT, PHILIP, B. S. L. E., Browning Lumber Co., Creosoting Dept., Tacoma, Wash.
GNOSE, IRA, B. S. L. E., 320 Hickory street, Anaconda, Mont.
HALE, MILLARD P., B. S. F., Morgan Hill Lumber Co., Morgan Hill, Cal.
HOPPING, GEORGE, B. S. F., Forest Entomologist, P. O. Box 308, Vernon, B. C.
MALHORTA, DES RAJ, ex-'25, Logging Engineer, Jammer Division, Wazerabad, Punjab, India.
McDANIEL, VERN, B. S. F., Oregon Forest Nursery, Corvallis, Ore.
MORSE, CLAYTON, B. S. L. E., Building Supply Co., 170 N. Front street, Salem, Ore.
MURDOCK, KENNETH, B. S .L. E., Asst. Engineer, Coos Bay Lumber Co., Powers, Ore.
ROBINSON, TEMPLE, B. S. F., City Forester, Amarillo, Texas.
ROTSCHY, SAMUEL, B. S. F., Economic Survey, N. W., Forest Exper, Station, Lewis Bldg., Portland, Ore.
SPAUR, GEORGE, B. S. L. E., Associated Oil Co., Roseburg, Ore.
STREILE, JOSEPH, B. S. F., Booth-Kelly Lumber Co., Eugene, Ore.

1926

BURSELL, HOMER G., B. S. L. E., Standard Appraisal Co., 636 Ry. Exchange Bldg., Portland, Ore.
CARTER, THOMAS L., ex-'26, Toppenish, Wash.
CASE, PAUL C., B. S. F., Asst. Ranger, Santa Barbara National Forest, Santa Barbara, Cal.
CURREN, WILL E., ex'26, Sanger, Cal.
FISCHER, ERNEST E., B. S. F., Inman Paulsen, 2021 7th avenue, Milwaukie, Ore.
GIBSON, ROY C., B. S. L. E., 865 Vancouver ave., Portland, Ore.
HALL, CHARLES W., B. S. L. E., Camp B., Clearwater Timber Co., Pierce, Idaho.
HAWKINS, LEROY A., B. S. F., Toledo, Ore.
JANOWSKI, ALBERT F., B. S. F., Clark-Wilson Lumber Co., Linnton, Ore.
JONES, SIDNEY C., B. S. F., M. S. F. (Iowa State), Entomological Dept., O. S. C., Corvallis, Ore.
LEWIS, TREVOR, B. S. L. E., 409 Seventh street, Aberdeen, Wash.
McGUIRE, KELLY B., B. S. F., Casper Lumber Co., Casper, Cal.
MILLER, WALLACE M., deceased.
OBYE, HERSCHEL C., B. S. F., Ochoco National. Prineville, Ore.
PFEIFFER, KARL, B. S. F., Port Townsend, Wash
ROSENCRANS, CHARLES, B. S L. E., deceased.
SHAVER. JAMES D., B. S. L. E., deceased.
THOMSON, PAUL L., B. S. L. E., Instructor O. S. C. School of Forestry, Corvallis, Ore.
ZOBEL, LOUIS R., B. S. F., Central Point, Ore.

1927

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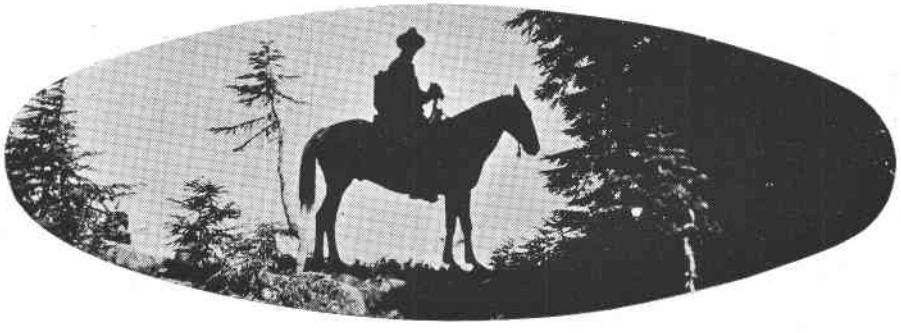

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Perspective

When I measure myself by the grasses
Then I am good and tall;
When I measure myself by the mountains
I do not exist at all.

It is very, very curious
How one may either be
A cat, that nibbles a moment,
Or a mouse in eternity.

—PAULA LEELER *from "The Salt"*

Those Who Helped

As another issue of The Annual Cruise is completed, we take the opportunity to thank all those who have aided in the work this year. To the advice and assistance given the staff largely goes the credit for this volume. May the book prove worthy of this help and a treasure to those who assisted in its make-up. To the advertisers especially do we express our appreciation of their support this year for it was through their assistance that this book was a financial success.

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Roy Alexander, Hicks-Chatten Engraving Co., Portland; for his advice, cooperation and interest taken.

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I Like the Virgin Forests

I like the virgin forest that covers God's green earth,
And all the fragrance from the trees, and mossy forest dirt.
And when the springtime fills the air and sap is flowing free,
I like to see my name in print upon a growing tree.

I like to hear the woodsman's axe, the ringing of his saw.
I like to hear the big trees fall and fill the woods with awe;
I want to see the vacant spot filled with a younger tree
And forests grow eternally for future folks to see.

I like to smell the sawdust that is flying through the mill,
And of the lumber in the yard and just from out the kiln.
I like to hear the planer sing and see the shavings fly
And feel the smoothness of the boards as they go rushing by.

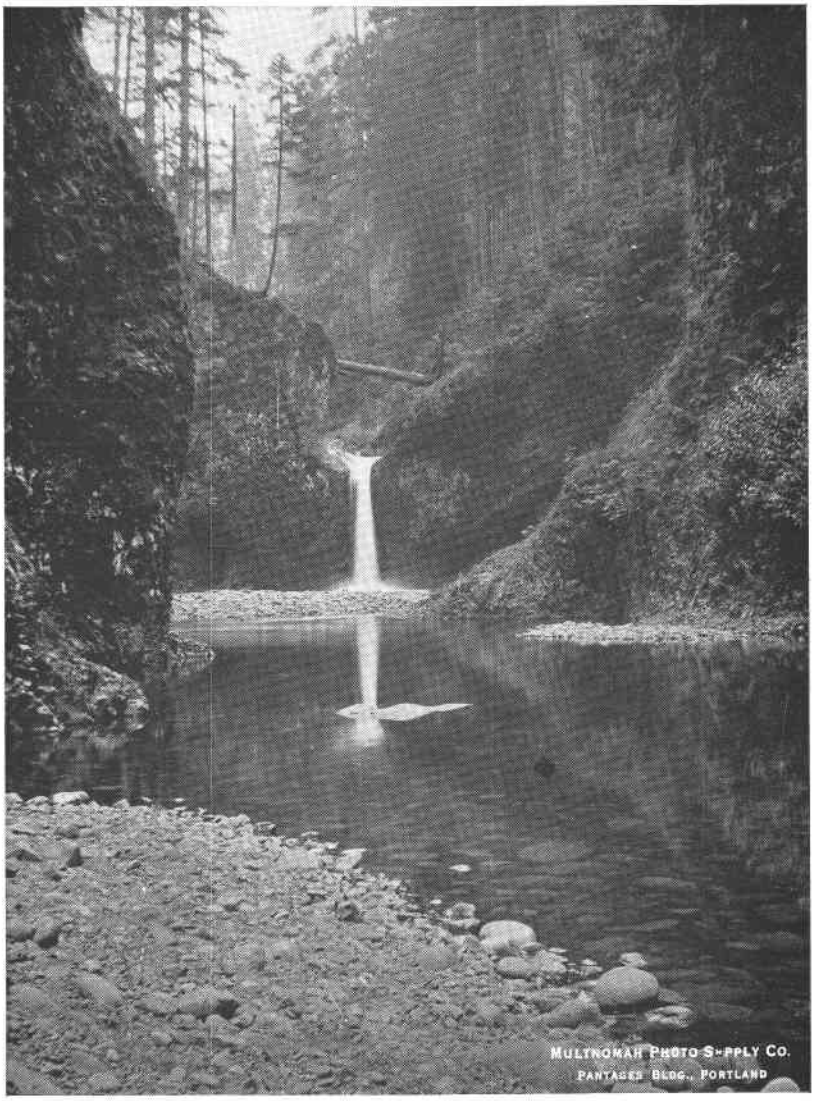
A house of stone for other folks perhaps is mighty good,
But I find only happiness in one that's built of wood.
I must have shingles on the roof and shakes upon the walls
And wood wherever it should be in all the rooms and halls.

I like to gather with my friends around the fireplace
And hear the crackling of the wood and see its lusty blaze;
Then while the embers slowly fade and silence turns to dreams,
I hear the forest calling me from all its hills and streams.

And when my life is full of gloom and sorrow and despair,
I wnader out among the trees and breathe the balsam air;
Then all my sadness, all my cares fly off on silent wings
Before the laughter of the wind that through the forest rings.

—DAVID DALIN, *Timberman, Feb. '32*

Advertising and Humor



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Handcuffed

(Continued from page 31)

mas, bringing the total to three. Of the sophomores Miles Compton, Patrick Lucas, and Sam Warg have been unable to resist the weaker sex.

And now for the freshmen. As this is written they should feel honored. They are not represented. The only blemishes on their record are John Montgomery, who attended school only during the second term, and Nate Wilcox, who got married the first of the year and took his bride off to Klamath Falls.

It seems to be the habit to tie a solid bowline rather than a slip-knot, as only three of the fellows have announced their intentions. These were Lee Hunt last fall, and just recently our senior editor George Churchill, and Walt Gustafson.—W. B.

"Absence makes the heart grow fonder," murmured Johnnie Parker.

"Oh, I don't know," remarked the girl friend, "Did you ever try presents?"

The 1932 Spring Trip

(Continued from page 21)

the surrounding hills — some traversing old trails, others locating new trails, and still others locating roads. The rooks spent most of their time making topographic maps. It was a tired and hungry group of woolen-shirted foresters who trooped into camp that night just in time to start cooking supper.

The second and third days were more or less repetitions of the first day with the possible exception of the duly elected cooks, who by this time had become extremely suspicious of the desirability of their jobs, and were reluctant to leave their blankets so early in the morning. The fourth morning was Sunday so no one was expected to do other than sleep late. Then after breakfast the instruments were checked in, and like the Arabs, the "fernhoppers" folded their tents and stole noisily away.—J. P.

Girl: "You must take me for a fool."
Upham: "Well, I would if I wanted one."

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Walter Bowne, Agent

Forage Utilization on the Forests of the Northwest

(Continued from page 35)

Even during the years of normal rainfall there was need for a certain amount of attention to the basic principles of range management in order to be assured of a reasonably permanent forage yield. Now this need is doubly great; it will require careful thought and planning to meet the conditions imposed by the drouth. There will be need for a more thorough knowledge of the forage plants and their growth habits and requirements; the extent to which these plants may be grazed and at the same time allow them to regain their pre-drouth vigor; the variation which future drouths or excessive rainfall may couse in volume of forage produced.

Any system or theory of improved range management coming out of a consideration of these factors must justify itself not only in improvement of the range, but also in greater profits to the livestock industry. For this reason there will also be need for correlating the requirements of the forage with the requirements of the livestock industry, and these, admittedly, are very great at this particular time.

Overgrazing may result from one or a number of causes including: (1) Placing more stock on the range than it can satisfactorily carry; (2) grazing the range in the spring before the majority of the palatable plants have had an opportunity to develop leaf growth; (3) uneven distribution of the stock on the range; and (4) stocking the range on the basis of average annual forage production where there is a shortage due to drouth. In the early days of National Forest administration damage from premature grazing was quite common but this has since been corrected by a rather general readjustment of grazing periods throughout the region. Overstocking probably needs attention.

Overstocking as a result of drougth in any one year ordinarily does not result in serious damage and any ill effects usually will be offset the following year if there is a resumption of favorable growing conditions. If continued for several years this kind of overstocking is certain to result in overgrazing and damage. In order to avoid just this form of damage, rather striking reductions have been made the past few years in the numbers of livestock allowed to graze on the forests of this region. On many ranges these reductions have met the requirements of constructive utilization; on some the question of overgrazing as a result of the continued drouth remains a serious problem.

On these latter ranges the loss to the livestock industry is felt most keenly in the middle or latter part of the grazing season because just at the time when an adequate supply of matured fat - building forage is needed to properly finish off the animals for market, the palatable vegetation has disappeared and the grazing animals are either losing weight or not making gains. Glaring examples of this were had in the more heavily drouth-stricken areas of the Northwest last season when 40-pound lambs and underweight cattle were taken from ranges where gains were impossible after mid-season. In situations of this kind it requires no special training or knowledge to know that the range is being grazed beyond the point of maximum returns measured in terms of either livestock production or forage perpetuation.

This may have been the final year of the drouth with a return to normal climatic conditions just around the corner. The winter's precipitation is encouraging. However, this must not be accepted as a signal for return to the old basis of stocking, since even further adjustments may be necessary to allow overgrazed and damaged areas to rebuild to their former capacity.

In going about this whole problem the practical range administrator knows that too many factors are involved to make possible a detailed standard of utilization for application over large areas. Each individual range is a problem of its own wherein general principals must be modified to fit the conditions found. Much can be accomplished by reasonable adherence to the simple rule of avoiding premature grazing and overstocking, and in addition allow a substantial surplus of feed as a margin of safety in emergencies such as the one just experienced.

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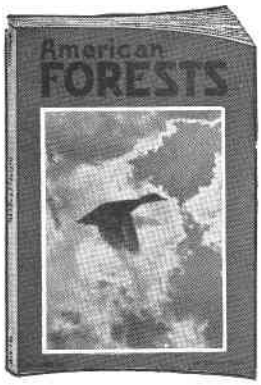

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Forest Experts Speak

(Continued from page 24)

ager of the Polk County Fire Patrol association.

"The Supervisor and His Job" presented by P. A. Thompson, supervisor of the Cascade National forest, gave forestry students an idea of what is expected of a forest supervisor. The most important job besides pure supervision, according to Thompson, is the ability to meet the public and discuss any subject with them.

O. F. Ericson, logging engineer for the government service, in his talk on "Selective Logging" said that in order for selective logging to become more widely practiced it must be analyzed in a business-like manner.

The last lecture was by R. F. Grefe, who is connected with protection planning for national forests in Oregon and Washington. His subject was "Protection Planning" and dealt with the studies and experiments being carried out in order to determine the most satisfactory and efficient method of forest protection against fire.

Students of the Forestry School appreciated the cooperation of the service in sending these men to give them the latest word in the various fields of technical development. Contact with these men in actual forestry work can do much to give them an insight into the actual work out on the job.—E. N.

"Harry" said Nelly, as he caught up with Fowells, on the way back to camp, "are all the rest of the boys out of the woods yet?"

"Yes," said Fowells.

"All six of them?"

"Yes all six of them."

"And they're all safe?"

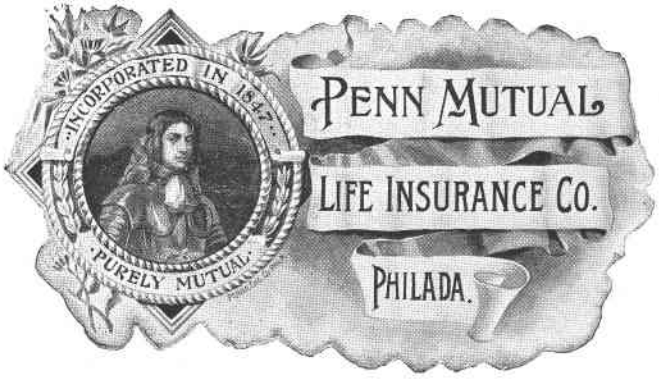
"Yep," answered Fowells, "they're all safe."

"Then," said Nelson his chest swelling, "I've shot a deer."

Baker: "Doyle, why isn't that lumber a higher grade?"

Doyle: "Because it isn't what it's cracked up to be."

Some who think their boss dumb would be out of work if he were smarter.



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School Kiln Comes to Front

(Continued from page 28)

Moore Dry Kiln Company of Portland, Oregon. In addition to the equipment found on commercial installations, added regulation of air circulation is possible and a large Fairbanks scale weighs the entire charge in the kiln at any time during the run. Thus, with accurate control of the temperature, humidity and circulation within the kiln as well as means of observing the rate of moisture loss, the kiln is well fitted for research purposes.

During 1931 and '32 a study was made in the drying of Douglas fir using schedules of constant temperature and humidity. Although definite results have not yet been determined it is hoped that results will indicate which of the three properties of the absorbed liquid, namely viscosity, capillarity and vapor pressure, have the major roles in the transfusion of moisture in this wood.

In all these schedules the rate of air circulation and the moisture content of the outer layers of the wood was kept constant as much as was possible. This shell moisture content was regulated by the humidity maintained in the kiln. In each schedule a certain temperature and a corresponding humidity which would keep the shell at the desired moisture content was held until the lumber reached the same moisture content as the shell or outer layers and no more loss of moisture occurred. The time taken for the lumber to reach this equilibrum point was compared for temperatures ranging from 135 to 190 degrees F.

With the other factors in moisture loss held constant the effect of temperature on rates of drying could be studied. However, the effect of temperature on moisture movement in wood consists of component actions of capillarity, viscosity and vapor pressure and to separate these components and give them their relative values is quite another problem.

At this time the research projects of students of kiln drying at Oregon State have not uncovered any new or startling facts in this field and this cannot be expected in the short period of nine months whcih is allotted to each man. But as a training school, it cannot be equalled. Here theory and practice are

mixed to an optimum percentage seldom found in the commercial field. On completing the work each student is well fitted to take a responsible position in kiln operation and if future research projects are directed along the lines already begun some future date should see valuable additions made to the facts of kiln drying.—R. M. E.

Bringing Home the Bacon

(Continued from page 29)

for the gang as a large group turned out to row in the class crews. Veldon Parker was the secretary of the Rowing club and coxwain of the senior bunch this year, and despite his enormous size, represented the foresters well. Other fernhoppers out for rowing were Simeri Jarvi, Everald Nelson, Norman Spangenberg, Walter Puhn, Phil Berger, Horace Lucas, Veldon Parker, and Newell Cory, seniors; Howard Bullard and John Philbrick, juniors; George Burnett, sophomore; and Gus Krause, John Shaw, Kermit Summerwell, and William Courtney, freshmen.

Track also called a large group with several of the fellows making a name for themselves at the running game. Herb Willison, Wallace Wheeler, Sam Warg, Hugh Nicholson, Niel Rice, Waldo Peterson, and Gordon Dixon turned out for the varsity with Wm. Dadurina and James Stoop out for the rook team. Lee Hunt missed a chance to again break into print in cross-country when the annual meet with Oregon was abandoned. Lee won his letter in that sport last year.

Ralph Apperson, who came back to school winter quarter to finish up, acted as manager of the polo squad which position he has held for the past two years.

This about rounds up the athletically minded and although there are probably more that should be included it is a difficult job to get the dope on them. Many of the fellows took part in intramural sports and helped their respective living groups bring home the silver cups. Their large number does not permit of their mention here but each deserves recognition. Although not a sport gang, the foresters showed they could meet and beat the best of them the past year.—M. L.

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Treating Poles in Service

(Continued from page 41)

foctor in determining costs olthough topogrophic conditions could not be overlooked in their influence.

A crew of obout twenty men ond o foremon wos used in the treotment work. The crew wos divided into four groups; two treoting outfits, eoch consisting of two burner men, o sproyer, ond on overseer, while the other men were obout equolly divided into two crews, one removing the dirt from oround the poles ond the other refilling the holes ofter burning. About 100 miles of pole line wos treoted eoch yeor from obout June 1 to October 1.

It wos expected thot the treotment would extend the life of the poles seven or eight yeors. However, it wos found thot the success of the treotment depended lorgely upon the condition of the pole when it is treoted, ond thot the chestnut reocted more fovorobly to the treotment thon the cedor.

Cedor hos o tendency to decoy from the heort out, rother thon from the surfoce in when set in the ground. In this cose the chor ond sproy method of treotment hos but little effect on extending the life of the poles. The present doy method of butt treotment before setting, reoches the heort decoy os well os the outside. As old poles ore reploced by the modern treoted ones, this difficulty of heort decoy will be remedied.

Lumber Manufacturing Instruction

(Continued from page 45)

with the technicol theories ond how to opply them, olong with the foct thot he is soving thot time out on the job which he would hove to spend working out similor conditions. Lost yeor, some comment wos mode by o few of the students thot it looked os though the school wos trying to moke the fourth yeor work similor to o trode school. The foct is thot these men hod not yet been out on the job ond hod not been oble to look for enough into the future to see the volue of this work. It is of more volue to the student to spend o o little less time on principles ond opply those given to specific coses, thon to be given o greot mony principles ond not understond their opplicotion.

The groduotes going out from school looking for o job should feel thot they hove o well-rounded, technicol knowledge of their profession. Opportunities in their field ore groduolly opening up with the closer utilizotion of the timber, reseorch olong the lines of merchondising ond wood uses, ond the development of foreign trode. The future of the lumber monufocturer lies entirely in his own honds with his odvoncements depending in the moin on his obility. If he hos foith in his profession, is willing to do plenty of good hord work, on ploy the gome foir ond squore, success ond sotisfoction ore bound to come.

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Forestry on the Air

(Continued from Page 47)

Tuesday at 12:20 o'clock during the Farm Hour and are from six to eight minutes in length.

To hold the interest of listeners, radio programs presented must be interesting and entertaining. The radio audience will not listen to long talks and they will no longer tolerate a lot of commercial advertising. The success of a radio talk depends largely upon its preparation. Every talk should be written before it is put on the air. The important stations demand this. Only a few of the smaller stations permit extemporaneous speech-making. The speaker has just so much to say and just so much time in which to say it. Broadcast time is too precious to waste in mere words and well-turned but unessential phrases. In the preparation of a talk for the air, one fundamental must always be kept in mind. It must be composed in what is called the "language of the air." First of all it must be written in a popular style. Technicalities, obscure words, and references which require explanation must be avoided. Also it must be informal and free from all oratory. Above all it must be written to hold the interest of the listener throughout the length of the talk. What really is needed is a style of writing that will present news and information to the ear as graphically as the modern newspaper presents news and information to the eye.

Presentation of forest facts to the people of Oregon in this graphic manner is the aim of the weekly broadcasts on forestry. Stories of the forest lend themselves especially well to this informal and popular style of presentation. Adventure, human interest, and action are some of the elements that always attract the listener's interest, and these are the important elements that are considered in the preparation of the weekly radio broadcasts. They are designed to promote general public sympathy and backing for forestry work.

Thus far the talks have covered a wide range of subjects, and in most all of them the story has carried with it some suggestion directed toward a defnite objective in promoting the development of forestry. Among the subjects that have proven most popular was the series of "Historical Trees of Oregon." In this series, 10 stories were told about famous living trees of the Oregon country—trees of historical fame; closely associated with the intimate life of the pioneers and which are symbols of the days whe the Oregon country was young. Other subjects discussed included such topics as "Forest Fires," "Forest Fires and Wild Life," "Our Forest Laws," "The Air Patrol," "Activities of the Field Force." At the present time there is being presented a series which deals with the commercial trees of Oregon, their identification and some of the interesting facts about them.

Frequently the question is asked whether the radio audience will listen to a prepared talk regardless of how well it is presented. Do they want anything other than entertainment over the radio? Experiments have proven that they do. A tabulation of eighteen types of programs in the order of their popularity revealed that short talks on interesting subjects stood fifth in rank. Radio listeners will tune in on brief, instructive talks if they are really interesting and well delivered. But they must be both.

Rangers in the Making

(Continued from page 56)

which to build; and second, the men, as in a trade school, were taught to do each particular job through the actual performance of of it rather than through abstract discussions.

The school also served another good purpose for it brought men from all parts of the region together. They became personally acquainted, developed a greater interest in the activities and problems of the rangers on other forests, and certainly learned different, and possibly better methods of carrying on their work through interchange of ideas. I believe that every man went back to his particular district more loyal to the individual forest, to the region, and to the Service as a whole.

Use of Timber in Highway Construction

(Continued from page 43)

been renewed fram time ta time. It is 250 feet lang and 75 feet abave the water. Althaugh this structure is 66 years ald the timbers are as saund as the day the trees were felled.

A few years aga the first McKenzie River bridge in Oregan was tarn dawn due ta a change in raad alignment. This bridge at the mauth af Mahawk Creek had withstaad 53 years af service and was as saund as new timber when razed. There are many ather examples af cavered bridges in the Narthwest that have dane valiant service and in practically every case their remaval was due ta change in alignment rather than ta disintegratian.

The fallawing excerpts and nates taken fram state highway and railraad recards are praaf enaugh that the danger fram fire is negligible. These were campiled by J. E. Mackie af the Natianal Lumber Manufacturer's Assaciatian and submitted ta the Oregan State Highway Cammissian an July 20, 1931:

In Wyaming anly twa bridges aut af five hundred in the state have burned in the past twelve years. The average fire lass per year is less than ¼ af 1 per cent af the tatal value af bridges in use.

In Lauisiana, where timber bridges are extensively used, the highway cammissian in the past six years has last anly ane timber bridge by fire.

In New Mexica where a vast number af untreated and treated bridges and trestles have been built, State Bridge Engineer Van de Gryn reparts anly ane fire in faur years, representing abaut ¼ af 1 per cent as the annual charge against fire.

State Bridge Engineer Slack af Geargia in April, 1929, wrate:

"There are in Geargia at this time 643 bridges af waaden canstructian with a length af 92,560 linear feet an the State Highway system. The state has had charge af main-

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Your friend,
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tenance of these bridges during the past seven years. During this time we have had no serious fires on any bridge on the State Highway system. Loss from fire during that period of time has been less than $1,000."

Assuming a unit cost of $38.00 per linear foot, this represents a loss of only $1.00 out of every $25,000.00 for each of the past seven years.

Mr. C. Coykendall, administration Engineer, Iowa State Highway Commission, states under date of April 24, 1929:

"It is the exceptional case where we hear of a wood bridge being destroyed by fire. We doubt whether there is an average of more than one or two such losses annually in the entire state. We cannot believe, in view of our experience in this state, that the fire hazard can be considered a very valid argument against the use of wood in the construction of highway structures."

The experience of the L. & N. Railroad shows a loss for nine years of $1.00 a year out of every $4,000 of construction, or 1/40 of one per cent.

C. S. Heritage, Bridge Engineer of the K. C. So. Railroad stated at the American Railway Bridge and Building Association 1924 annual meeting that experience of many engineers has proven that the creosote treatment of lumber does not increase the fire hazard, and that, after being exposed for six months or more to the air, it is actually more fire-resistive than untreated lumber. In an actual fire the amount of charring of a treated timber is less than one not treated, even though the oil content created a hotter fire. The standard zinc chloride preservative treatment adds considerable fire resistance to a timber so processed. Zinc chloride being deliquescent absorbs moisture from the air quickly and therefore provides fire resistance.

In the discussion which follows Mr. Heritage's paper, I. L. Simmons of the CRI & P. Railroad stated that of 321,000 lineal feet of timber bridges (some treated with preservative and some untreated) their annual loss from fire was $8,000 per year for 11 years. Assuming a fair value of $38.00 per lineal foot, the loss was only 1/15 of 1 per cent per year.

R. W. Rear, Engineer of Bridges, SP Railroad, adds the experience of his road by stating their fire loss record on 631,590 lineal feet of creosoted trestles to be about $900.00 per year for a period of 20 years, which is less than 1/240 of 1 per cent. This is considerably less than the previous and is no doubt due in part to the oil-burning locomotives used by the SP Railroad.

Many of our concrete highway bridges are designed and are structures of beauty. If they are properly located, however, this skill of design is lost, because they should be on a straight away and therefore the traveling public does not see the sides.

Norway and Switzerland are two countries that have used wood for their bridges for centuries and many of these with their graceful trusses are things of beauty.

Experience indicates the length of life of highway structures to be less than 25 years. This is due to the cry of the public of "more speed." More speed means straighter alignment. Add to this more traffic, greater loads, and changing design both in motor vehicles and motor transportation in general, and you have the reasons for the almost continual relocation of our highways. The salvage value of a concrete bridge is minus, that for a wooden structure is considerable.

For every $100,000 expanded in concrete bridges there is used approximately 2857 yards of concrete at an average cost of $35 a cubic yard. This would make a total of 4561 barrels of cement for each $100,000 worth of concrete in bridge structures, whereas, $100,000 worth of concrete pavement will produce 9091 cubic yards of concrete, or approximately 3.87 miles of road with a total of 20,000 barrels of cement, a ratio of almost four to one. Using wood for the bridge would still leave a ratio of three to one. Through a change in bridge building policy Wyoming has diverted more than $2,000,000 from bridge to highway construction in two years.

One of the best resources of any Pacific state today is the tourist trade. If Oregon,

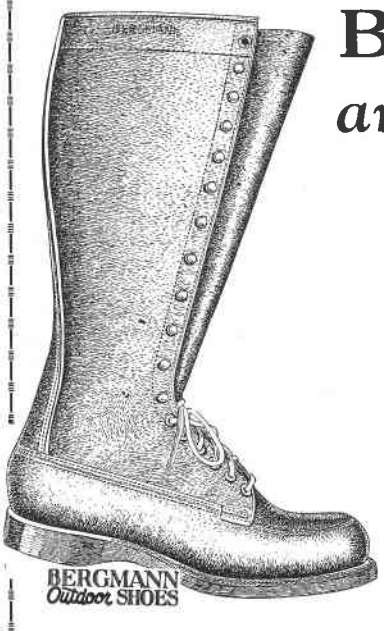
Washington, or California would all use wood in their highway structures would not other states soon be educated that these states are saving money on their bridges and at the same time demonstrating in a most practical way a belief in wood as a structural material?

The highway engineer points out that there is as much wood used in a concrete bridge as goes into a timber bridge and that this should satisfy those who are interested in the growing and harvesting of a crop of timber. However the quality of lumber used is far different and the returns to the lumberman are far less than in the case of the timber bridge. Also the concrete bridge is not an advertisement for the many fine qualities of a timber bridge. And further, the lumberman is a taxpayer and is interested in either receiving a smaller tax statement or in having more miles of highway completed for each dollar he contributes.

Two Pals

And Spangenberg, the shiek, still insists that an annual whorl is a yearly dance.

Some make progress others just mistakes.



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Problems Encountered in Forest Survey of the Douglas Fir Region

(Continued from page 39)

within a type calls for a new subdivision line on the field map. Since it had been decided to subdivide all types below 150 years into 10-year age classes, the problem was how stocking could be shown so as not to run into unnecessary detail. To use the system of tenths would mean ten possible subgroups within each age class within each type. This was obviously out of the question, and it was also obviously necessary to allow for stocking. Four major stocking subdivisions were finally decided upon for use in describing stands of second-growth. Areas under 10 per cent are called non-stocked, areas 10 to 40 per cent stocked are called "poorly" stocked, areas with 40 to 70 per cent stocking are called "meduim" stocked, and areas 70 to 100 per cent are called "well" stocked. In patchy country a certain amount of intelligent generalization is necessary to give a good average picture of type, age, and stocking conditions and still not map below minimum type areas.

Another problem was how to take care of areas recently cut over. Such lands might be covered with fresh raw slash, others might have been recently burned, the older ones might be restocking. Obviously, these recent cut-overs are in a state of flux; they have not had time to either be restocked or to have been repeatedly burned over to the point where they can be said to be permanently non-restocked. It was therefore decided to simply type them as "recent cut-overs" with no attempt at any further classification. The next thing to decide was at what point in time should we stop calling them "recent cut-overs." It was finally decided that ten years represented a sufficient "state or flux" period, and as the first plans were being drawn up in the winter of 1929-30, it was decided that all areas cut over since January 1, 1920 would be classified as recent cut-overs.

There are many areas of both cut-over and burned-over land in the region where the presence or absence of reproduction and the stocking of reproduction, if present, are difficult to ascertain by casual inspection. This is especially true in localities where the trees are still below the height of the brush, fern, and weed cover on the ground. It was apparent that for such areas some sort of rapid sampling process would have to be developed.

It was recognized that trees per acre alone are not a measure of stocking unless the distribution of the trees on the ground is considered. Five hundred small trees crowded into one corner of a square acre might not make the acre better than poorly stocked, while the same number of trees well-distributed over the acre would make it very well stocked. It was evident that distribution of the trees must be taken into account in a sampling process.

The stocked square method had been used before by both foresters and botanists but foresters had generally used the mil-acre square (6.6 ft. x 6.6 ft.) and had used them in continuous strips. A little trial showed that running a strip 6.6 feet wide, with ten contiguous 6.6 foot squares to the chain, was slow and could not be done except by using a graduated tape. There was also considerable doubt if as many as one thousand well-spaced Douglas fir trees were necessary to adequately stock an acre in this region. By working with the yield tables for Douglas fir which show the number of trees per acre in well-stocked stands at different ages, it was finally decided that if an area of land in the Douglas fir region were divided into squares 13.2 feet on a side, and if there was a tree on each square, the area would be well-stocked when the stand reached merchantable size. In other words, more than one tree would be superfluous on each 13.2 foot square. If then it would be possible to determine the per cent of such stocked squares on any area, a picture of the stocking of the area would be obtained.

At first strips consisting of contiguous 13.2 foot squares were tried, but it was found that, as in the case of the 6.6 foot squares, men could not pace 13.2 foot distances accurately and using graduated tapes meant two men

to the crew. On the other hand, by taking only one square at the end of every chain, pacing could be used which would mean a one-man crew, but this would give only a few plots for a day's work.

The plan finally developed is for the field man to pace a chain and stick his Jacobs staff in the dirt at the end of a chain. He is then standing in the center of four squares, each 13.2 feet on a side, with the edges of the squares parallel to his compass course. He inspects each square to see if there is one well-established tree present. He merely tallies the number of squares stocked at each stop. This system gives a maximum number of squares with a maximum of accuracy and a minimum amount of effot and man-hours per acre.

Considerable thought, as well as a material amount of experimentation, was given to the question of how could the cruise data as furnished by any one company or individual be adjusted to the utilization standards set up by the survey. It was at first thought that possibly a study of the utilization practice of the company, the instructions issued to its cruisers, and a check of the cutting records of the company might yield sufficient evidence on which to adjust the cruise data. It was soon apparent that of these items the cutting record was the only one of value, and in many instances these are not kept so as to be comparable with the cruise records, and in many other instances there are, of course, no cutting records since no cutting has taken place. It was evident that cruise data would have to be sampled by having the Survey's cruisers recruise certain sample descriptions.

The next questions were, how big should these samples be, how should they be distributed, and how many should be taken? Since the forty is the smallest unit for which any cruise data are kept, the unit of sample could not be less than a forty, but would a forty or any number of scattered forties give a measure of the quality of the cruise under question? It was decided that the forty was too small an area since no two cruisers or their compassmen will pace and run their compass lines exactly alike and there is little chance that they would each cover the identical area when reporting on a forty. Also

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there is no chance on only one forty for compensation in the variation in timber.

It was therefore decided that four forties, either four in a row from section line to section line or four in the form of a quarter-section, would be the minimum unit for checking, and in many instances a full half-section is used. On areas of this size the work of two different cruisers can be compared without any fear of one man having by accident hit better or poorer timber than the other. From the standpoint of statistical procedure, it was admitted that this sampling would be better if done by a purely random method—for example, taking the N½ of Sections 16 and 36 in each township—but in actual practice this mechanical sampling would not gibe with ownerships involved, areas cut over, not to speak of accessibility. In this region, with its relatively few roads and trails in areas of merchantable timber, the job of getting from one section in a township to another three or four miles away is a problem. It was therefore decided to pick samples, first, so as to get ownerships and, second, so as to be reasonably accessible to roads and trails.

When it came time to assemble data for certain counties which had been completed, the problem of "areas" arose. The so-called "official" areas of many of the counties in the region as published by the Secretary of State and the U. S. Bureau of Census, as well as the official areas of the national forests as put out by the Forest Service, do not check with the areas for these units as determined by the Survey when it carefully adds up all the township plats for the surveyed townships and planimters the latest maps for the unsurveyed townships. Although at this time no official decision has been made on this question, the Survey staff is of the opinion that its areas are more correct than the official areas.

There have been just as many puzzling problems encountered in working out plans for the depletion, growth ,and requirements phases, but these are another story.

Page the dumb junior who thinks a cutting-cycle is a vehicle for felling trees.

Watch 'em Grow!

It's mighty interesting to plant some young saplings, give them constant cultivation and watch them grow into sturdy trees.

Every Forestry student knows this to be a positive fact.

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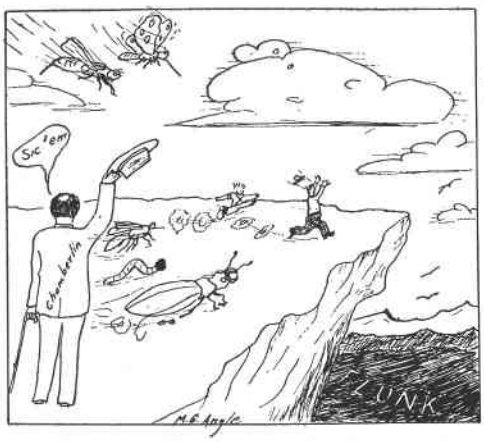
Kiln Prize Given

(Continued from page 20)

a greater moisture content than that ordered. The operator had taken samples and found the correct moisture content after the stock had been put through the kiln. When the stock was not at the proper moisture content after planing it was reasoned that there must be an appreciable change in the moisture content of the two-inch stock when the dry shell was surfaced off.

The study called for samples from several plants in the Willamette valley. The study aimed to correlate the various schedules of different plants with the moisture gradient that was found in their stock i.e. to find the relation, if any, between drying schedules and the variation in moisture content from the outside to the inner portions of their stock.

Merle Lowden received this prize and is now engaged in the work.—W. B.



Will somebody please choke the aspiring senior forester who lists the increment borer as a Forest Insect.

Mase in Gen. For.: Let's go over some definitions. Baker, what does J. F. stand for?

Bake: Well, according to general observation, I would say "Jobless Future."

Co-ed: Gee, I wish I could rate with Connie Wessela!

Her Roomie: What do you want Conifer, anyhow?

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X Sigma P

(Continued from page 20)

Lowden, Harry Fowells, Fred Joy, and Robert Evendon, students and E. G. Mason, Fred Schreiner, P. L. Thompson, H. R. Patterson, Wm. J. Baker, George W. Peavy, and J. K. Brandeberry, of the faculty.

At the initiation banquet Dean Peavy gave the address. Speakers at the two other banquets arranged by social forester, Lucas, were J. Lloyd LeMaster of the political science department and Dr. J. B. Horner, well-known authority on Oregon history.

The Sophomore scholarship award and paperweight were given to Henry Tiedemann on the basis of his scholastic average during the school year of 1930-31. His name joins the list on the Xi Sigma Pi plaque which hangs in the lower hall of the Forestry building. Other men having attained this distinction in former years are Daniel Janzen, Roy Blomstrom, Albert Arnst, and Herbert Willison.—R. M. E.

And then there's the F. E. student who thinks a Base Line is a low form of chatter.

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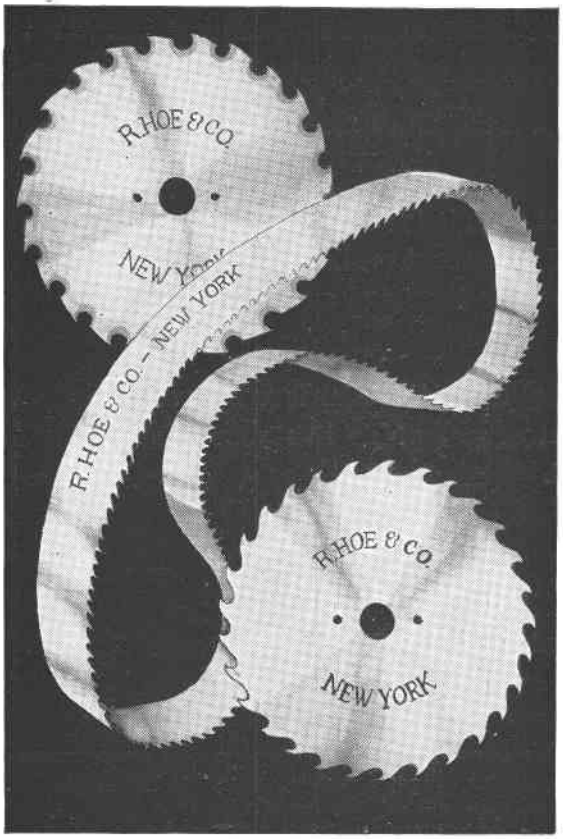

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Where a small coleopterous weevil
Effectively dines
On the murmuring pines
And the hemlocks—a terrible evil.
—Harvard Lampoon

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A rounder espied her and plied her with cider
In a cabin old and medieval;
Little Miss Muffett decided to rough it
And now she's the forest's prime evil!

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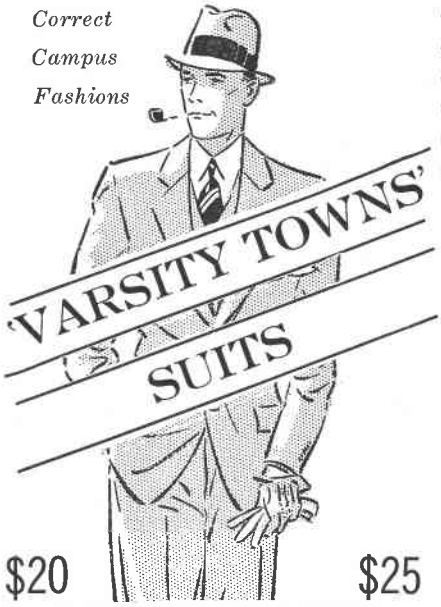

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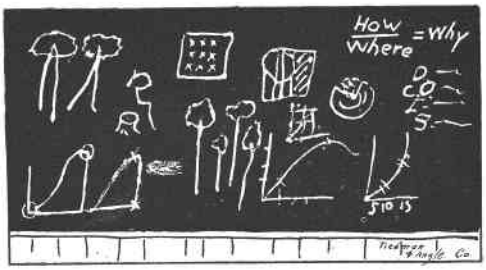

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When our last election is over,
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And the bells for its ceasing are tolled;
When corruption lives merely in legend,
And men are unmoved by gold—
Why, the world will go on just as ever—
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But to us, we are sons of God's regions
And our hearts beat with undying youth.

While riding the burning deserts
Or searching the fern-sweet glen,
We live in the peace and silence,
Supreme in the souls of such men.

Our campfires have gleamed on the deserts
And out on the mountain tops.
Our tracks have marked the regions
Where the bite of the blizzard stops.

Sweet peace of physical tiredness;
The comfort found in deep pain—
We know the laws of the open
We labor for them, not for gain.

We are the last of the social,
Souls bittered by civil command;
We live not the rules of the cities
And know only the master's hand.

Content in our hearts with nature,
On mountain or prairie sod,
We scorn the strife in man's cities
And dwell in the Temple of God.

—CLEON CLARK, '32

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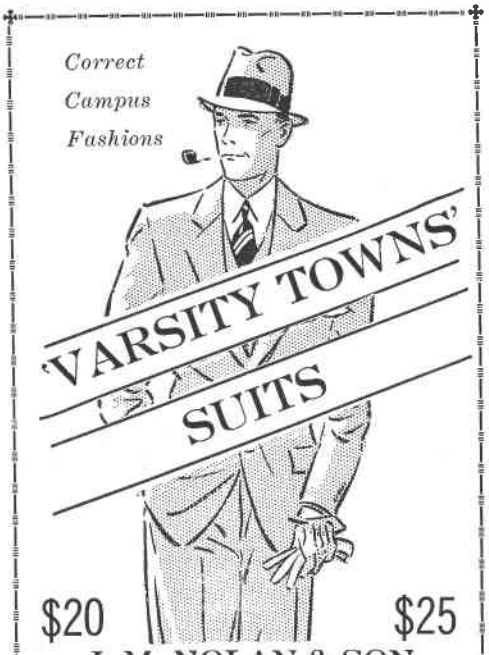

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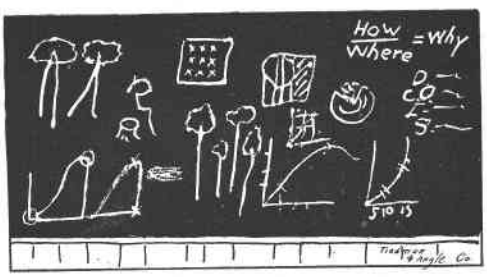

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The School of Forestry Has Its Own Building, ample in size and well equipped for work. The School has its own experimental forest of 1300 acres twenty minutes from the campus and a 500,000 capacity forest nursery. Extensive forests are readily accessible. Logging operations and lumber manufacturing plants are near at hand.

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STUDY FORESTRY
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The Roving Legions

We are the ranging vanguard,
A roving and restless crew.
Hard bitten by wind and weather
And known as friends by few.

Unschooled in the ways of the social,
Some call us hard and uncouth;
But to us, we are sons of God's regions
And our hearts beat with undying youth.

While riding the burning deserts
Or searching the fern-sweet glen,
We live in the peace and silence,
Supreme in the souls of such men.

Our campfires have gleamed on the deserts
And out on the mountain tops.
Our tracks have marked the regions
Where the bite of the blizzard stops.

Sweet peace of physical tiredness;
The comfort found in deep pain—
We know the laws of the open
We labor for them, not for gain.

We are the last of the social,
Souls bittered by civil command;
We live not the rules of the cities
And know only the master's hand.

Content in our hearts with nature,
On mountain or prairie sod,
We scorn the strife in man's cities
And dwell in the Temple of God.

—CLEON CLARK, '32