A FORESTER'S LOG: FIFTY YEARS IN THE PACIFIC NORTHWEST

An Interview with George L. Drake Conducted by Elwood R. Maunder in Four Sessions in 1958, 1961, 1967, and 1968

Forest History Society

Durham, North Carolina

© 2004

Copyrighted © 1975, 2004*

by the Forest History Society, Inc.
701 William Vickers Avenue, Durham, NC 27701
All rights reserved.

* Notes re the 2004 revised edition: In 2001 Martin G. Morisette keyed into electronic format the 1975 typed first edition of this interview using a photocopy of the original transcript provided by the Forest History Society. Morisette, who was not a Forest History Society employee, produced the electronic transcript for the purpose of providing himself a means of searching the text for specific information. He maintained original square [] and round () bracket formatting included in the original transcript and added curly { } brackets around a few insertions he added into the text during his transcription. Morisette modified text only where obvious typographical errors appeared in the original or where different spellings of words more adequately reflected modern spelling standards. Michele A. Justice, Assistant Archivist/Librarian for the Forest History Society, edited and reformatted Morisette's electronic transcription to produce the final 2004 revised edition of this interview. Due to reformatting pagination and footnote numbering in the 2004 revised edition differ from those in the original first edition.

Table Of Contents

INTRODUCTION	iv
INTERVIEW I (NOVEMBER 10, 1958)	
Founding of Pacific Logging Congress and Drake's involvement beginning	
in 1919; George Cornwall's influence on the Congress; other early leaders;	
Drake's forestry education at Pennsylvania State University; trail building	
and timber cruising in Oregon and New Hampshire summers of 1910,	
1911; development of tractor logging; lumber camps; labor and unions;	
forest fire protection; trade associations.	
INTERVIEW II, SESSION 1 (SEPTEMBER 9, 1961)	
Charles S. Cowan and George L. Drake	
National Industrial Recovery Act, 1933; lumber industry trade associations	
committee writes up Article X of Lumber Code; William B. Greeley's role;	
growth in consciousness of industry toward proper forest management	
and fire protection	22
INTERVIEW II, SESSION 2 (SEPTEMBER 10, 1961)	
Major accomplishments in field of forestry; fire protection; multiple use;	
forest management.	32
INTERVIEW III, SESSION 1 (FEBRUARY 22, 1967)	
George Cornwall and development of logging engineering in forestry	
schools of Washington and Oregon; trade journals; Drake's summer	
employment in New Hampshire, 1911; Edgar C. Hirst; travel between	
East and West Coast, 1910; timber cruise with U.S. Forest Service in	
Oregon, summer 1910; college professors who influenced Drake;	
permanent employment as timber cruiser with U.S. Forest Service,	
1912, Oregon and Washington; forest examiner in Alaska, 1914-18;	
forest examiner in Oregon, 1918-30; flu epidemic; development of safety	
practices in the lumber industry; Pacific Logging Congress; Bush Osborne	
and Julius Hofmann fire study, 1921; aircraft lumber for World War I;	
railroads to Oregon timber areas; sale of government timber	37
INTERVIEW III, SESSION 2 (FEBRUARY 23, 1967)	
Forest Service timber sales, Oregon; contributions of leaders in forestry;	
technological developments in logging equipment; multiple-use concept on	
national forests.	70
INTERVIEW IV (JANUARY 19, 1968)	
Drake's employment with Simpson Logging Company beginning in 1930;	
labor and unions; C.H. Kreienbaum; Depression years; U.S. Forest Service	
employment in Alaska, 1915-18; National Industrial Recovery Act, 1933;	
Simpson acquires timber land; forest surveys; Mark Reed, president,	
Simpson Logging Company; David T. Mason sustained-yield advocate;	
Shelton Sustained-Yield Unit; safety in logging; tractor logging; industry	
leaders	
APPENDICES	
INDEX	

Introduction

Few men who have labored as professional foresters in the richly timbered Pacific Northwest are remembered by their peers more fondly than are George Lincoln Drake and the late Charles S. Cowan. Drake, born and raised in New Hampshire, has not lost a distinctive Northeasterner's brogue or the great talent of the Yankee to tell a story with wit and sly transfer of wisdom. This is primarily his memoir, with Cowan entering as a party to the second interview.

Like Drake, Cowan enjoyed a great reputation as a raconteur. Cowan came to a long and distinguished career in the Pacific Northwest via an education in forestry at Oxford, a tour of duty as a young forester in India, and as one of H. R. MacMillan's corps of forestry pioneers in the first British Columbia Forest Service. He was responsible for the earliest survey and inventory of the forest resources of that province and in a separate memoir made with me in 1957 recounted some of the details of that work. He served first as a Canadian infantryman in World War I and was transferred to the Royal Canadian Air Force where he rose to the rank of Major, a title he greatly cherished and one most frequently used by those who knew him up until his death in 1969 at the age of eighty-two.

Major Cowan's most important contributions to forest history are recorded in a book *The Enemy is Fire* which he wrote and published in 1961 through the Superior Publishing Company of Seattle, Washington. In this work he recounts the long struggle carried on against forest fire in the state of Washington. Public and private landowners joined forces in that struggle under the leadership of the Washington Forest Protection Association headed by Cowan. Cowan was first hired by the Association as its Chief Fire Warden in 1927. He performed thirty-one years of service as head of the organization and retired in 1958. My first efforts to tape-record his memoirs came in October and November 1957 and portions of these have been published in article form in early issues of the *Journal of Forest History*. The full text of the Cowan interviews remains to be published in hardcover by the Forest History Society when funding is made available.

George L. Drake was born in 1889 in central New Hampshire. His father was a knitting machinery expert and conducted a manufacturing business. The young Drake went to school firmly resolved to fit himself for work in some phase of mechanical engineering. He began his college training at New Hampshire State University but soon transferred to Pennsylvania State where he was graduated in 1912 as a forester. During the summer vacation periods between years of his college training he worked for the United States Forest Service (1910) building trails; in 1911 he was put to work by Edgar C. Hirst, first state forester of New Hampshire. In the summer months following his sophomore and junior years Drake went back to school in a summer camp conducted by the Penn State Forestry School and worked in a lumber camp in northern New Hampshire.

Following his graduation, Drake entered the Forest Service at the bottom rung of the ladder and was assigned to southern Oregon near Klamath Lake. He cruised timber there and later in the year 1912 was transferred to the Okanogan National Forest in northeastern Washington where he took part in pioneer aerial surveying and mapmaking. There, at a Halloween dance in Okanogan, he met and began to court a young schoolteacher named Dora Polly whom he married two years later in September 1915. He recounts in this memoir some recollections of his early career which will be of particular interest to scholars of early twentieth-century forest history and to veterans of the Forest Service.

Drake's career in the Forest Service took him to Alaska in 1914. There he served in various capacities until the end of World War I. Drake recalls that it was a time of exciting new development for

¹ Charles S. Cowan and Elwood R. Maunder, "Forest Protection Comes Under the Microscope," *Forest History* 2, Nos. 3 and 4 (Winter 1959), 1-14.

the territory. War brought a steadily increasing demand upon the forests and a fast-growing fishing industry. He became acquainted there with men such as Roy Barto, William Weigle and Frank Heintzleman, all prominent figures in the development of Alaskan natural resources. When America entered the war Drake attempted to enlist in the Tenth Engineers but was rejected for a physical defect. He was soon thereafter transferred from Alaska back to Oregon and put in charge of Forest Service timber sales on the Whitman National Forest, later to the Regional Office in Portland.

In 1930 Drake came to the attention of the late Mark E. Reed of the Simpson Logging Company and was hired to become the company's logging engineer. Deeply interested in the fast-developing technology in the woods, Drake became a leader in the Pacific Logging Congress and for most of the years of his active life staged seminars on "What's New In Logging" before large audiences attending the PLC's annual meetings up and down the West Coast. He became associated closely with Cowan in work on forest fire control and prevention, supported with enthusiasm the research of W. B. Osborne and Julius Hofmann and developed a finely tuned sense of public relations in personal friendship with trade journal titan, George Cornwall. Drake's great skill in reaching people at the grass roots with useful talks on fire prevention, good forestry practice, and their relationships to the business community won for him wide acceptance as a public speaker. Demands for his participation in the governance and activities of a wide range of conservation, forestry, and industry organizations grew rapidly, and his superiors in the Simpson organization, most notably C. H. Kreienbaum and William G. Reed, encouraged him to accept such responsibilities. Drake came to know as a personal friend Colonel William B. Greeley who had left the position of chief forester of the United States in 1928 to become head of the West Coast Lumbermen's Association. He maintained close friendships with his old colleagues in the Forest Service, a fact which, perhaps, played no small role in the establishment in 1946 of the first Sustained Yield Working Circle program involving both forested lands of Simpson and the Forest Service in southwestern Washington. Drake recounts details surrounding the negotiations connected with setting up the Shelton Sustained Yield Unit in this memoir. They are further revealed in a similar published memoir of the aforementioned C. H. Kreienbaum.²

The reader of forest history will find in these pages many references to labor relations, conditions of work in the woods and mills of the Pacific Northwest, new inventions which greatly influenced the course of logging and reforestation, railroad and truck logging, the impacts of the National Industrial Recovery Act and the Lumber Code Authority of the Depression years, the emergence from that experience of a new concept of forest conservation by industry, as well as valuable personal observations on Mark Reed, William B. Greeley, David T. Mason, leaders in forestry education and in trade and professional associations.

The four separate interview sessions of which this volume is made up were conducted November 10, 1958; September 9 and 10, 1961; February 22; 1967; and January 19, 1968. Funding of the costs of travel, transcribing, editing, and final processing of this work was generously provided through grants of the Louis W. and Maud Hill Family Foundation of Saint Paul, Minnesota, and the Simpson Foundation, the Simpson Timber Company and Mr. William G. Reed of Seattle, Washington.

A special word of appreciation is extended to David James, recently retired from Simpson Timber, for much help and encouragement in seeing this interview into print. James was the man handpicked by George Drake to carry on the public relations functions which he considered so vital to good company community relations. James has many of the same abilities Drake has in making friends among a wide range of people, even among the segment sometimes hostile toward those who must cut trees for a living.

٧

² C. H. Kreienbaum and Elwood R. Maunder, *The Development of a Sustained-Yield Industry: The Simpson-Reed Interests in the Pacific Northwest, 1920s to 1960s*, typed transcript of tape recorded interview (Santa Cruz, California; Forest History Society, 1972).

Many employees of the Society have worked on these transcripts over the years. Among them have been Ann Lindquist, Aline Menefee, Judith Rudnicki, and Susan R. Schrepfer. Final production was made possible through the combined efforts of Karen L. Burman, Barbara D. Holman, and Pamela S. O'Neal of the Society's oral history staff.

Elwood R. Maunder Executive Director Forest History Society

Santa Cruz, California December 8, 1975

Elwood Rondeau Maunder was born April 11, 1917, in Bottineau, North Dakota. University of Minnesota, B.A. 1939; Washington University at St. Louis, M.A. (modern European history) 1947; London School of Economics and Political Science, 1948. He was a reporter and feature writer for Minneapolis newspapers, 1939-41, then served as a European Theater combat correspondent in the Coast Guard during World War II, and did public relations work for the Methodist Church, 1948-52. Since 1952 he has been secretary and executive director of the Forest History Society, Inc., headquartered in Santa Cruz, California, and since 1957 editor of the quarterly Journal of Forest History. From 1964 to 1969, he was curator of forest history at Yale University's Sterling Memorial Library. Under his leadership the Forest History Society has been internationally effective in stimulating scholarly research and writing in the annals of forestry and natural resource conservation generally: 46 repositories and archival centers have been established in the United States and Canada at universities and libraries for collecting and preserving documents relating to forest history. As a writer and editor he has made significant contributions to this hitherto neglected aspect of history. In recognition of his services the Society of American Foresters elected him an honorary member in 1968. He is a charter member of the international Oral History Association of which he was one of the founders. He is also a member of the Agricultural History Society, the American Academy of Political and Social Science, the American Historical Association, the Organization of American Historians, the Society of American Archivists, and the American Forestry Association.³

-

³ Adapted from Henry Clepper, ed., *Leaders of American Conservation* (New York: The Ronald Press Company, 1971).

INTERVIEW I

George L. Drake Forty-ninth Pacific Logging Congress Portland, Oregon November 10, 1958

- Elwood R. Maunder (ERM): George, the purpose of this interview and those that I'm conducting with other men who have been active in the Pacific Logging Congress history, is to get down as much as we can about some of the details that don't show up in written records of the Congress.⁴
- George L. Drake (GLD): Elwood, my memory of the Logging Congress begins with 1919 when I came to Portland to work with the U. S. Forest Service. Since then I have attended most of the sessions of the Congress, so what I might have to contribute dates back to about 1919.
- ERM: What do you recall about the part George Cornwall played in the beginnings of the Pacific Logging Congress? How does he stand out in your memory?
- GLD: George Cornwall was publisher of a small newspaper at Cathlamet, Oregon and about the turn of the century he came to Portland and started *The Timberman*. He had a definite influence on the whole trend of logging as practiced in the Northwest, through this magazine. When the Pacific Logging Congress was established, he played a very important part because he was its first secretary, and through his magazine he was able to give a lot of publicity and attention to this movement which has been so worthwhile through the years. George was a very fine old gentleman, very friendly. In connection with *The Timberman*, he traveled around through the Northwest and British Columbia. He saw the need for a meeting of loggers to discuss their problems and undoubtedly was the missionary who first developed this idea.
- ERM: Do you think he had any other motive in setting up the Congress?
- GLD: No, I think he was just interested in the whole logging industry and saw this as a means of getting better relationships among the loggers. He saw the need of bringing to the forefront the improvements that were coming out in the way of better equipment, because it was about that time that the field for logging equipment began to expand as heavy machinery came into the woods. Naturally, as publisher of a magazine, he was interested in getting advertisements, and the more he could get people interested in machinery, the more ads he got. It all added up to prosperity, but I don't think he had any ulterior motive. One thing which George Cornwall initiated which was very helpful, was the interest in and recognition of the need for schools to teach logging engineering. Forestry schools were getting under way as early as 1908 or 1909, but George Cornwall was really the father of the courses in logging engineering at Washington, and at Oregon State. If for nothing else he would be remembered as being the father of logging engineering as a distinctive profession.
- ERM: His publication and other written records seem to indicate that he was dedicated to the idea of making logging engineering a recognized profession. Have you any idea why he felt so keenly about this?

1

⁴ For a copy of the Constitution of the Pacific Logging Congress, see Appendix A, p. 111.

GLD: He realized that the days of taking an ax and blazing a trail through the woods for a logging road were past. You had to have engineering of a different type than you'd have in a regular civil engineering course. You had to understand logging problems.

ERM: What characteristic do you remember most vividly about the man?

GLD: He was a very kindly old gentleman, as I remember him, and one that everyone respected.

ERM: Well, that picture makes him seem to be quite a different type of man than the old, hard-bitten logger of that period. Actually he wasn't a logger; he was a journalist. But he did take an interest in the loggers' problems.

GLD: George Cornwall was by nature a very friendly man and enjoyed being among loggers. He got to know them in his early days at Cathlamet—at that time an important logging center on the middle Columbia. He sensed the need of the logging industry for a publication that catered directly to the logger and his problems. He was successful in getting men on his staff like Harry Potter who talked the loggers' language and who, by trips to the woods, found out what new ideas were developing.

I remember having the problem of how to get logs off a hillside too steep to railroad, and asking Harry to let me know if he ran across any similar show that had met the problem. He found a case in Oregon. We visited the show, came home and started a successful cat show that was copied by others. In other words *The Timberman* and *The West Coast Lumberman*, our trade journals, became the eyes of the industry.

ERM: Did you know Ed English of Lyman Timber Company, in Seattle, who had a part with Cornwall in setting up the Congress?

GLD: Ed English was one of the leading independent loggers in Washington about the time the Congress started and I remember hearing that he had quite a bit of interest in setting up this organization. When I knew him, Ed was getting pretty well along in years and he was always one of the guests of honor at the Logging Congress.

ERM: Do you remember any stories about these men?

GLD: Well, not especially of Ed English or George Cornwall. I don't think Cornwall was a man about whom many stories were made.

ERM: He wasn't the rip-snorting type, in other words?

GLD: Oh, no. He was just a fine old gentleman, as I recall.

ERM: Well, George, maybe we ought to pass over those early years and get to the period in which you became active in the PLC. But before we do that, can you give a little personal background—where you came from, where you went to school, what your early experience in forestry was, as a backdrop to these other things which will come later?

GLD: I was born and raised in central New Hampshire. My father was in the knitting-machinery Business and naturally when I went to school, my first thought was to fit myself for some phase of the machinery business. So I took—at least signed up for—mechanical engineering. But my

⁵ Cat show, a logging operation using Caterpillar tractors.

freshman year was mainly successful in hazing and football and the result was that I was not given any Phi Beta Kappa key the first year.

ERM: Where was this, George?

GLD: That was back at New Hampshire State. It's interesting how some things change your whole future. One day in the spring we were having civil engineering practice on the campus, and I think the big job then was setting up a transit. The rest of us youngsters were sitting on a ledge on the campus and one of the fellows remarked that he wasn't going to be back there the next year but was going out to Michigan State. We asked, "What for?" He said, "To take landscape gardening." Well, we kind of had a half idea of what that was—picking daisies or something like that.

Another chap said he was going to Penn State and was going to take forestry. Well, that was a new one! So we asked him what that was and he said it was a life out West where you rode horses and had a perpetual picnic in the woods at Uncle Sam's expense. That sounded very alluring, especially when I thought of the calculus and higher mathematics that lay ahead of me. He said, "I'll bring you up some literature. " So he brought up a Penn State publication which played up the part of the boys' experience out in the West where they rode horses and had a hell of a good time. Afterwards I wrote the same kind of bunk myself, so I'm probably guilty of making some other people go wrong. But the result was that next all I was at Penn State.

Much to my surprise I found that all the subjects I had taken in mechanical engineering didn't count; that the whole year of German I flunked was against me. The result was I started to become a student and forgot about being a football hero. I finally fooled the faculty and graduated in forestry in 1912. The summer of 1910 I spent in Oregon building trails and cruising timber; then in the summer of 1911 I worked for the state of New Hampshire under Ed Hirst who was the first state forester of New Hampshire.

ERM: When you went out West in the summer of 1910, who were you working for?

GLD: The Forest Service.

ERM: And that was just a summer job?

GLD: Just a summer job. It was quite educational. Another chap and I got out to Eugene, Oregon with \$20.00 to our credit and went to see the supervisor about taking this job. Much to our surprise we found out they had never even heard of us. He was a very curt individual and said, "If you'll come back tomorrow I'll try to find out what this is all about." So we went back the next day and were told they didn't know anything about us.

"Well," I said, "We've got to eat; have you got any jobs?" He very graciously offered us a job building trail at \$1.50 a day. We were to report to McKenzie Bridge the day after the Fourth, and without any further ado he dismissed us. We went back to the hotel and discovered that McKenzie Bridge was fifty miles away, so being a very prudent Yankee, I put \$10.00 of our \$20.00 in the bank for a deposit, which made quite an impression on the bank. Then we hiked the fifty miles up to McKenzie Bridge. The first night we made about half the distance and we walked the last mile barefooted. We survived that summer and went back to school in the fall with about enough money to pay our expenses, but we did have a lot of wonderful experiences.

ERM: In that regard, what job opportunities were there for forestry students during the summer months in those times? Was that about the only work you could get?

GLD: Well, jobs were fairly plentiful and it was probably the best experience we could have at that time.

ERM: In other words the students looked in the main to either state or federal jobs in the summer?

GLD: Most of the jobs were federal and it was rather interesting that where they happened to be assigned influenced the future of the men that took those jobs. When the Forest Service came around to offer you a job after you passed the civil service forest assistant's examination, if you had made a fairly decent reputation in their particular district, they asked for you to be assigned there. For instance, I got a job in the West; other boys that I knew worked that summer in the White Mountains in New Hampshire and most of those fellows went back East to work. So fate was directing that my career probably would be spent in the West.

ERM: You mentioned working in 1911 under Ed Hirst in New Hampshire. Can you tell a little bit about that experience?

GLD: That was a very interesting experience because Ed was a wonderful man to work with. I had quite a thrill the other day to see Ed presented with an award of merit from the American Forestry Association.

ERM: What did you do in that job?

GLD: I had a variety of jobs. One was working in the nursery pulling weeds. The rest of the summer we spent surveying, making maps, and cruising the lands that had been given to the state by various agencies. Then one of the last jobs I had was to make a fire-protection map for the city of Concord, which embraced about forty-nine square miles. That was really a step forward in better fire protection. It was good experience.

ERM: You are a graduate then of Penn State School of Forestry?

GLD: That's right.

ERM: Of the professors you studied under there, who stands out most vividly and had the greatest influence on your career?

GLD: Well, the man whom I look back on as having a real influence on all of us was John Ferguson. Last year at the fiftieth anniversary of the school I had the pleasure of seeing Fergie again. He is a very dynamic fellow, much the same type as George Peavy who was dean of the School of Forestry out at Oregon State. I don't recall him as being the most scientific forester in the world, but he had the happy faculty of putting steam in us and also of seeing to it that we learned the fundamentals of forestry.

ERM: Did he teach the whole run of forestry courses or was he a specialist in silviculture?

GLD: Well, I think at various times he taught most of the subjects, but mainly silviculture.

ERM: How much of a faculty did Penn State have in those days?

GLD: Oh, we had about five instructors and professors. I think there were thirty-five students in my class.

ERM: In your junior and senior years there, did you go on summer trips?

GLD: I spent the summer of my sophomore year at a summer camp. I entered as a sophomore, although I took everything from freshman to senior work that year. We went down to southern Pennsylvania, and that was mainly to teach us which was the busy end of the compass, and how to pace, and the fundamentals of nursery. They didn't want us to come West, since we were so

green. Then in the senior year we spent a month in a logging camp of our selection. I happened to spend it up in northern New Hampshire. There we stayed with the loggers for a month and scaled logs and kept our eyes open to what we could learn.

ERM: Whose logging camp was that?

GLD: I think it was Frye and Veazey. It was at West Thornton where the Forest Service now has an experimental watershed on which they are studying the effect of streamflow.

ERM: After you finished school, George, you took the civil service exams and passed them and were assigned where?

GLD: I came out West in August 1912 and was assigned to a cruising party in southern Oregon on Klamath Lake. After that work was completed in the spring I came up to the Columbia River and worked on a cruising job for about two months and then went to the Okanogan National Forest in northeastern Washington and made a cruise and map of about a half-million acres. Most of it was an area that hadn't been mapped before. They even had the forest boundary signs a half inch over into Canada.

ERM: What were the purposes of these cruises made by the Forest Service?

GLD: At that time there was no map of that section of forest and I mapped the timber resource and also the grazing resource of the country. I used the end of an apple box for a plane table and carried my control down from the Canadian border, about sixty or seventy miles. It was interesting because my supervisor was not in sympathy with the project and was semi-hostile all the time, but when I got through he did thank me and said the grazing map justified my existence, at least. It brought in about 40,000 head more of stock that they didn't know they had feed for. Incidentally, I wore out seven pairs of shoes on that job.

ERM: That sounds as if it was a strictly walking job.

GLD: There wasn't anything else to do but walk. You couldn't get to town to get the shoes fixed so you just bought another pair and threw the old pair out in the brush.

ERM: This terrain was too rough for horses?

GLD: We had horses to pack our bed and grub, that's all.

ERM: How many were in the party?

GLD: There was another chap, and he was supposed to do the mapping, but I found out he didn't know how to draw a map so I did all that and just let him pack. Then in the spring of 1914 an opportunity came up for a job in Alaska. It sounded very interesting to me especially because there was quite a bit of boating connected with it.

I was able to play up in my application the fact that I was a seasoned mariner, having spent many rugged years on Lake Winnipesaukee, which apparently made an impression on somebody. I also found out that the man on the job there was not very receptive to anybody that smoked, so I implied in my application that I had become a Christian and didn't smoke. That lasted until I was assured of my job up there.

I spent four years up there. Very interesting years. There was a lot going on. At the time I went to Alaska, the two Alaska national forests, the Tongass and Chugach, were under the supervision of the district forester of District 6 in Portland. We were so isolated that the local forest supervisor, Bill Weigle, pretty much ran his own show. (Bill, by the way, is still alive at

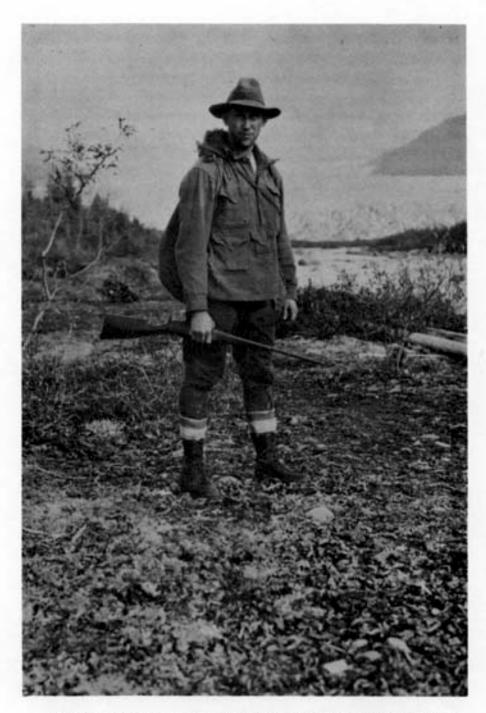


Photo taken of Drake while on the Tongass National Forest, Juneau, Alaska, 1915. In the background is the Mendenhall Glacier.

ninety-one, and each winter, Roy Barto, one of the rangers of 1914 and I enjoy a lunch with Bill in Los Angeles.) During the war years of 1914 to 1918, the Alaska forests were more active than at any period up to the coming of the pulp mills a few years ago.

The war had developed a market for canned salmon. New canneries were springing up all over southeastern Alaska and the demand for piling and salmon boxes was very active. As a result of the influx of men to work in the woods and canneries, many applied for June eleventh forest homesteads, so there was much demand on my time for surveying. We even laid out town sites. At the same time the government railroad was building from Stewart to Fairbanks. The summer of 1915 I spent around Anchorage, supervising the sales.

To add to the joy of life, the Department of the Interior, which wanted to abolish the Chugach National Forest, bucked the Forest Service wherever possible. I was in at the founding of Anchorage. As an example of the cooperation of the Department of the Interior, when the townsite of Anchorage was established under the jurisdiction of interior, they moved the red light district outside the city limits onto national forest land, and called it Huntsville after the local forest officer. Fortunately I was not qualified as a sanitary inspector.

Our work was all in small boats which I enjoyed, and for four years I visited most of the coast of southeastern Alaska. My successor was Frank Heintzleman who rose to regional forester of the Alaska Region and later became governor of Alaska. My real contribution to the development of Alaska was making it possible for Heintzleman to go to Alaska.

When we got into the war I tried to enlist, but didn't get into the first two training camps. Then I had a chance to go with the Tenth Engineers so I ditched the job and went down to Seattle. There I was thrown out for a physical defect and went back to Alaska and stayed there until the spring of 1918 when I returned to the States and went over to eastern Oregon in charge of timber sales on the Whitman National Forest. After spending six or eight months there I came into Portland to the regional office and stayed until 1930 when I had a chance to go with Mark Reed of Simpson Logging Company.

- ERM: Then you were with the Forest Service in eastern Oregon when you first got to be associated with the Pacific Logging Congress?
- GLD: No, it was after I came down to Portland in 1919, where because I was in the office of logging engineering I naturally started attending the Logging Congress.
- ERM: What was the general attitude of Forest Service personnel toward the Logging Congress in those days?
- GLD: We were all very happy to get a chance to go to the Logging Congress because it was an opportunity to meet the people in the logging industry and also to listen in on the discussions and take a part in them. Men from the Forest Service were often on the program. For several years, I was chairman of the spark-arrester committee that the Logging Congress headed up.
- ERM: You worked with Charlie Cowan on that, didn't you?
- GLD: Yes, Charlie was one of the members of the committee.

⁶ Forest Homestead Act of 11 June 1906, 34 Stat. 233.

ERM: In an interview we had with him last year, Charlie told us in great detail about some of the trips that you and he made.⁷

GLD: I think we took one trip together up on the St. Paul and Tacoma operation where they were trying out a new type of spark arrester for coal-burning equipment. Another project that I had which was very interesting was drawing up Forest Service timber sales contracts, especially the specifications that had to do with fire protection.

One year I made a special trip through quite a few of the different logging operations on the Columbia River to find out some of the desirable practices, and many of those were written into Forest Service contracts.

ERM: What was your attitude in regard to those specifications that were put into the contracts for government timber?

GLD: I think the ones that we were most interested in were cutting practices and fire protection. Most of the contracts today are practically word for word what we wrote in them in that day.

ERM: They haven't changed much?

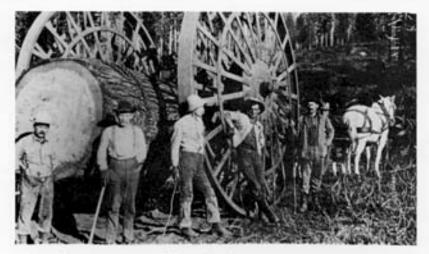
GLD: No. One of the most interesting experiences I had was in connection with the development of tractor logging as we know it today. Nothing that I take pride in doing, but I was an instrument of God I guess, in the development of arch logging that is so common today. We had several sales over in the Bend country, which is a pumice country where the soil in the dry weather becomes very, very loose. In fact, the only time you can get good soil conditions is after a rain when the pumice hardens up and becomes very firm. The prevailing type of logging over there prior to tractors was horses and bigwheels. They would cut the timber into sixteen-foot logs and use horses to skid them into piles called bunching and then the bigwheels would come in and pick up the loads and take them to the landing.

About this time—this must have been in the very early twenties—tractors were coming into the woods. This developed from the use of tractors during the war. Jack Meister, who was the superintendent of the Shevlin-Hixon operation, and one of the stalwarts of the Logging Congress, conceived the idea that maybe if he would take a tractor he could haul more logs to the landing. So they used a tractor instead of the six horses and when they hooked on to the turn and made the turn a little bit heavier, they found out that they were tearing the bigwheels apart. But by adding more and more braces to the wheels they were able to pick up the turn.

Then somebody got the brilliant idea. If we can bring in this big a turn, why cut these logs into sixteen-foot lengths and put two tiers on a car? Why not make them into thirty-two foot logs and then we'd only have to load half the logs to get the same volume on the cars. They started doing that and found they couldn't bunch a thirty-two foot log with horses; so they brought a tractor into the woods and used the tractor to snake these logs out of the brush into the piles. Then hell broke loose! Very shortly the local Forest Service men sent frantic requests for somebody to come over and see what could be done about it.

I went over to Bend immediately and went out into the woods. It sure did look like hell. There were two things that created this impression, one was that when the horses were used they had to build roads through the reproduction. The common practice was to send swampers in and cut the reproduction neatly off and pile it up, thus opening up a road. Well, that didn't look too bad, it looked kind of park-like. When you took a tractor in and just busted a way through, it

⁷ Typed transcript of tape-recorded interview with Charles S. Cowan, retired executive secretary, Washington Forest Fire Association, conducted by Elwood R. Maunder, Forest History Society, 1956.



Early day logging with bigwheels.



A "sulky" being pulled by a tractor.



Arch-type log supporting device with crawler treads, used with a tractor to facilitate skidding.

accomplished the same purpose, but everything was laid on its back and it did look like hell. The damage was no greater, it just looked worse.

In that kind of soil when it was extremely dry, a man's foot would disturb the soil for a foot or so around where he stepped. And a horse would make a bigger disturbance. Then when you got a tractor in and it switched around on its tracks, you might move the little trees from a distance of ten or fifteen feet on either side, just uproot them. They would just fall over. So I said to Jack Meister, "Something is rotten in Denmark that has to be corrected. But we are not going to shut you down, because this is progress; you can't get away from it."

He and I agreed to select a ten-acre piece that we thought was representative of the forest conditions and we made a very detailed map of every tree and seedling on this tract. We sent men in there to fall the timber. Then we went back and remapped it, and we recorded all the damage that had been done by the falling. Then they yarded the trees together and we went in and remapped it. Then they took the logs out of the woods and cleaned up the area and we remapped it again. So we had a picture of what damage was done by each stage of logging and it showed that the damage from the bunching, the yarding, was the greatest portion of the damage. Probably eighty percent of the damage was caused by that.

So after this map work was done I said to Jack, "This is your baby. This is your type of logging and something has got to be done about it. Now I'm not going to tell you what to do because I don't know myself, it's up to you." Jack conceived the idea of putting a drum on the back end of a tractor, an idea that had never been used in connection with yarding. Then he took the highwheels and put a fairleader on top of the highwheels and he had the arch as we know it today. What he did was to open up main roads, which caused no greater loss than you had in horse logging, and then they would fall the timber diagonally, herringbone fashion, with the lead to the road. They would put the cat in the road and yard-in these logs, pulling them out of their bed, thus not disturbing anything unnecessarily. Then they built up the turns and came into the landing. The next step was the development of the Athey tracks which were used in place of the wheels and were easier to pull than the bigwheels. Then you had the present day logging arch, which is still the prevailing method of logging in the pine country and on favorable ground in the fir and redwood regions.

ERM: When you became active as a member of the Pacific Logging Congress, you got on the resolutions committee. Can you tell us how that particular committee functioned and what it actually did?

CAC: I think I started appearing on the resolutions committee some time in the thirties. I began to take more interest, naturally, in the Congress after I went into private employment. I served on the resolutions committee so long that I finally threatened to start a resolutions committee union and get at least time and half for our services. I thought it was certainly time that some other people got on it. But by and large I think the resolutions are helpful, mainly in getting to the attention of the public some of the problems that we of industry are confronted with and on which we think the public should know our position. We try to see to it that a copy of these resolutions is sent to the people in the Congress, for example, those who are directly connected with our problems. Resolutions, to my notion, are only effective if they are pushed and brought to the attention of the people who should know that these things are being considered.

ERM: How is the resolutions committee made up?

GLD: Well, it is generally a distribution of men from public agencies, state agencies, and private industry.

ERM: In other words you tried to keep some kind of balance.

GLD That's right. And we tried to keep out of highly controversial subjects that our membership was concerned with, although sometimes in resolutions against proposals being made by men in public office, we did express an opinion, that possibly the government representative wouldn't vote on. But the one thing that I always watched very care fully was to be sure there was nothing introduced in a resolution that interfered with the friendly relationships between Canadian and United States members of the Congress. Some crackpot would want to put in a resolution for a tariff on logs from British Columbia. Well, that didn't make sense, so we just kind of kicked that out of the window. We did quite a bit of screening and either tempered the resolution that was sent in so that the man who was the "father" wouldn't recognize his own "child" or we just didn't present it.

ERM: Was there a similar problem with regard to resolutions that would try to smack the wrist of either the Forest Service or industry?

GLD: Well, we tried to bring out a fairly rational resolution, but we didn't hesitate to take a stand if we thought that some of the thinking wasn't sound. For instance, some ideas which we weren't very happy about were for government regulation of the lumber industry.

ERM: Were these resolutions very hotly debated within the resolutions committee?

GLD: Generally no. Oh, they might be discussed at the resolutions committee, but generally when they came to the floor of the Congress, there wasn't much discussion. Part of that was due to the fact (which always burned me up), that they would leave the resolutions to the dying hours of the Congress when everybody was raring to get out of there and get home. So later we presented them in the early sessions of the Congress, as is the practice now. There is more thought in the handling of resolutions now that members are appointed earlier in the session, and the time for resolutions to be submitted is earlier. We generally had some idea of what the really important things were and would suggest to certain parties that they write resolutions. Generally they were people who were capable of doing a good job.

ERM: In the early days of the Congress it seems that there was a strong thread of reformism running through the resolutions of the Congress.

GLD: That was during the period of the thirties.

ERM: No, even earlier than that, back in Cornwall's time.

GLD: Well, during the Pinchot days when the Congress was in session, there was great hue and cry about the lumber barons, and naturally the Logging Congress was on the defensive.

ERM: Better conditions in the logging camps was one of them.

GLD: Well, that was mainly from the agitation that came up through the IWW [Industrial Workers of the World], which was a very radical organization at the time. But when the war came on and the government became interested in the production of logs, there developed an organization known as the 4L [Loyal Legion of Loggers and Lumbermen] (Lovers-of-long-legged-ladies or long-lean-lousy-lumberjacks, whichever way you wanted to call it) but undoubtedly there was a lot of progress made that way. The Wobblies [IWW], of course, always claimed all the credit, but I don't think that's right. I think the government agencies, especially the War Department, were quite interested and had certain standards of howl men should live in a camp—an interest in sanitation, let's put it that way. The 4L was a very forward step and had some good leadership, some good men running it. So it was just a natural trend. The improvement in living conditions wasn't only in the lumber industry. In the average American home we were getting certain improvements. We thought we had to have hot and cold water instead of a can of water in back of the stove. We were keeping stride with things.

ERM: Would you say that the war had a strong influence?

GLD: I think it did. The early airplanes were mainly made out of spruce—that was before the use of aluminum—and this area was the great source of spruce in this country. There was a very decided effort on the part of the War Department to encourage the development of spruce production, so the Spruce Production Division came into effect. While it was inefficient in many ways, it did provide guite a bit of materials for the war.

ERM: It set a new pattern for lumber camp operation, is that it?

GLD: Well, they sent so-called troops into the woods and they had certain standards as to how men should be housed, which was a little different, perhaps, than the thinking of some of the old-timers. Not any better than the more progressive ones for there was a general trend toward better facilities anyway. Mark Reed, for instance, had hot and cold water in the bunkhouses long before anybody else ever thought of it.

ERM: Was it his experience that this paid off?

GLD: Yes, Mr. Reed felt very much that way. It was progress.

ERM: What other steps did you find that the Spruce Production Division took which carried over?

GLD: Well, the eight-hour day came in about that same time. But I think the better facilities in the bunkhouses and sanitation, and so forth, came along about that time.

ERM: Did this tend to keep men on the job longer, make the labor market a little more stable than it had been before?

GLD: There were a lot of men coming into the woods at that time, because of the war, who hadn't come in as loggers. Many of them were boys from the farms and towns, and they were a little different breed than we had been getting before. Before World War I men came into our camps from the Scandinavian countries, and from eastern Canada, who were used to living under very primitive conditions. To the French-Canadian logger that was just natural. Even his standard of living at home wasn't too high. Beans and salt pork and the "lettle on-yean" on the table was natural for him. And the Scandinavians—I've been over to Scandinavia a couple of times and the housing conditions there were every bit as primitive as Late as after World War II as they were back in our country in 1900. To me they were very, very backward. So when those people came over here, they didn't see any change in the standard of living.

But when you took the boy off the farm or the boy out of town and he became the logger because of the scarcity of other men, he naturally wasn't too happy with his housing conditions, and he was vary susceptible to the radical IWW who were crying about everything, and nothing pleased him. So the enlightened operator began to feel that he had to change and fix things up. As long as people take it for granted, you don't make changes oftentimes. But the better the housing conditions, naturally the more content people are, although the logger is a type of breed that when he wants to go to town, he has to get his teeth examined, or his wife is out of kindling wood, or the color of the cook's hair, or something else is wrong.

ERM: Do you know what led the PLC to take up the question of camp sanitation? Were resolutions to consider these matters brought into discussion by Lumbermen?

GLD: The first discussion I ever heard about logging camp conditions was a paper that was read, I think here in Portland, by a fellow named W. C. Ruegnitz, who after the war was the head of the 4L organization. He was originally an accountant with the Bridal Veil Lumber Company which had a logging operation up at Wind River. There he put into effect some of his own thinking on keeping of cost accounts in the camps and setting up an efficient organization for housing and feeding the men. He presented a paper at that Congress on this one problem and it got quite interesting reactions. I remember old Joe Irving, of Sultan Railway and Timber Company, Everett, Washington, who was a very rugged individualist and a person we always enjoyed when he got on his feet, because he always said something quite original in a way that only Joe Irving could say it. Somebody asked, "Are there any comments from the floor?" I think Ruegnitz had given some of the typical menus they served. Old Joe got up and said, "By God, I'm not for this grapefruit on the table in the morning. I get the same thing in my home!" Then he started a tirade against his daughter's extravagance. We never did get back to the logging camps; the rest of the discussion was on his own family. But it was typical of what the reaction was.

ERM: In other words would you say then that some of the old loggers took a measure of pride in roughing it, in having it the hard way?

GLD: Well, that was traditional. You hired out to be tough. It came out of the logging camps in the East. Those camps, where I spent some time as a boy, were pretty rugged things in the light of today. We never saw camp in the winter except on Sundays because we were out before daylight, came in after dark. We ate in the messhouse on tin plates—had lots of food. The food was always well cooked, but we didn't have any grapefruit for breakfast. We probably had prunes. And where we slept at night was one big old log cabin with about fifty men in it. There were two little windows near the roof you couldn't even see through. You were overcome with the odor of drying socks and crawled into bed with the bedbugs and that's where you spent the night. It was just taken for granted you were going to be tough when you hired out to be a logger. Changes were coming especially as transportation got better in different places. But I think there always was a pride in good food. A logging camp that wanted to keep men always served lots of good food. There was never a wide variety, but there was always plenty of it and it was always damn well cooked.

ERM: The improved transportation was a factor here, too, wasn't it?

GLD: Well, it made it easier to get supplies in; to get fresh vegetables. In the early days the average store didn't carry much green stuff—you couldn't get lettuce or fruits out of season, you took what they had. And that's still typical of the old country where they eat the particular fruit or vegetable that is ripe at the time. But as transportation got better and refrigerator cars started moving up from the South, you could buy green vegetables out of season and they began to show up in the camps. Even the American family was not living on too varied a diet in those days.

ERM: Do you think that the Pacific Logging Congress was an influence for better conditions?

GLD: Oh, definitely, because these things began to get discussed and the human relations part of it was emphasized. Any time you had a discussion or somebody presented a paper on the subject like this, it excited interest and other people began to get aroused. Then about that time, I think in the early thirties, there began to be more of an interchange of ideas. People visited around

⁸ W. C. Ruegnitz, "Relation of Camp Life Conditions to Logging," *Proceedings, Tenth Session, Pacific Logging Congress*, Portland, Oregon, October 8-11, 1919, pp. 33-4.

more and saw what the other fellow was doing, mainly through acquaintances made at the Congress. And another factor that was very, very helpful and which hasn't had all the credit it should have, is the part our trade publications on the West Coast, especially *The West Coast Lumberman* and *The Timberman*, have played in disseminating good ideas. They have been very keen about that. They played a very important part.

I know from experience in our own organization that prior to those days our key man seldom got around to see what others were doing. Maybe you made some improvements but nobody else knew about it and you didn't know what the other fellow was doing. I'd say, starting in the thirties, there began to be more of a spreading of ideas. People visited around, possibly the automobile or better roads played a part. One of the fine things this Congress has been able to do is to allow people to have time to meet and get to know each other. The result is, when you run up against a problem and you know that Bill Smith down in southern Oregon has reached a solution, you probably go down there and see him, and are welcome. The logger is a curious animal, he invites his competitors to come in and see how he is doing it, and he probably boasts about it. You see that reflected in the Congress. Where thirty years ago people were very cagey about saying how much things cost, now they don't seem to hesitate so much. It's no longer a trade secret.

ERM: Now they take pride in their accomplishments?

GLD: Well, they always have. Goes back to King Solomon and old Hiram of Tyre, I think. If you want to get some early history of logging, you want to read II Chronicles 2:8-18 and I Kings 5:6-16 and see how Solomon planned for the logging of the timber for the temple. It's quite an interesting story. Probably the first recorded chronicle of any use of wood, on a major scale, in history, because the earliest civilizations were in the treeless areas where they used stone and adobe and what have you. But old Solomon he had it all figured out. He even knew how often a man should get home and split his kindling wood. Somebody said that's because he had such a vast marital experience that he appreciated the desires of the normal male.

ERM: Well, now George, what about the whole subject of safety in the woods and in the camps? This was something that was coming up for discussion at this time, too. Do you remember any of the details, any of the factors which were influential?

GLD: I don't know what year safety began to be discussed, but I think it was probably about the time that the need for industrial safety began to be appreciated in other branches of industry. I think a lot of that goes back to the days when mechanization crept into industry, because when you do things without power tools your chances of accident are probably less. People were always getting cut with axes or horses were kicking them, or something happening, but it wasn't given prominence until safety was first mentioned in industry throughout the country (I don't know the year), and it gradually crept into our industry.

I had an interesting experience along that line. I was in Geneva, Switzerland, in 1954 as a delegate for the United States at an international logging techniques group that meets every two years. One of the main divisions of that conference was on the training of woods employees. In Scandinavian countries and in Russia, too, they give quite a bit of attention to teaching men how to work in the woods. They also teach some forestry, how to plant trees, along with it. So when the subject came up before the general assembly, after it had been in panel discussion, they asked me what we were doing in this country. I said, "We are doing very little of that, for the reason that the average American boy who comes to work in the woods is mechanically minded. He's been driving an automobile since an early age; knows how to take a Ford engine apart and

_

⁹ *See* Appendix B, pp. 112-113.

put it together again. We don't have to teach him what a sparkplug is and things of that kind. So we haven't felt the need of that kind of job training, but where we do spend our effort is in instructing our foremen how to be better foremen, how to handle men. And the main effort is given in teaching safety both to the supervisory personnel and the workmen, because the more you become mechanized, the more you have to pay attention to safety."

I had been up in Scandinavia and had seen men working in a foundry with sandals on, where hot steel and heavy weights were, which we wouldn't think of letting a man do without a pair of safety shoes. It was very apparent to me and I said, "I think you are going to have that same thing confronting you over here as you get more mechanized. You are going to realize that safety is a part of good management." Wall, the kick I got out of it—the Russians, of course, couldn't be out-classed. They do everything by percentages, and the Russian delegate got up and said, "In the Soviet Union we are very safety minded. We have a record of 94.22 percent."

You never knew whether that was compared with the year one or the year before. I was greatly tempted to get up and say, "Well, if I could tell some bird that I see without a hard hat, 'If you don't have that hat on tomorrow morning you're going to be logging in Siberia,' I'd probably get some results." But I didn't think it was the diplomatic thing to do.

Safety has been something that has crept in and developed as the need has been felt for more care with machinery. And the loggers have taken a great interest. We've written most of the safety codes as a result of practices that have been proven out. Same way with fire. Most of the state fire regulations are a result of practices that have been tried out and proven in the woods.

- ERM: Do you believe this developed as management began to realize that its labor force was a resource, too, and that teaching it safety was just good business?
- GLD: That's it, good business, let alone the human phase of it. Nobody likes to see anybody hurt; the suffering caused, not alone for the man, but for the family and community. It is just bad business to have an accident. You can't have a fatal accident without it upsetting production for that day. People naturally are upset. So it's just good business. That hasn't been the predominant thinking, but it's there, you can't get away from it.
- ERM: Then right along with that, of course, there came laws for workmen's compensation.
- GLD: Well, they were coming into the picture. I don't know how much they were discussed in the Congress, but I think they really got the impetus from far-sighted men like Mr. Reed, and I refer to him because I knew him very well. I know that he had a very important part in the state of Washington in the enactment of the workmen's compensation laws, because he realized that men did get hurt at times and that there was a need for some protection for them.
- ERM: You mentioned the pressure that was beginning to be felt by loggers from labor groups like the IWW.
- GLD: The IWW was only a transition stage and did not represent the best labor union thinking by any means.
- ERM: But it was a pressure, however?
- GLD: A pressure, yes. And of course they took advantage of war emergencies. They felt they had the upper hand; they weren't friendly to the war, they were antagonistic to it. They were just opportunists.
- ERM: What would you say was the general attitude of the members of the Logging Congress toward the IWW?

GLD: The IWW was a threat to any decent men you had working with you, or your organization, because they were very anti-industry and anti- every thing else. They were followers of Karl Marx—with anarchist leanings.

ERM: Were the members of the Congress very outspoken about the IWW?

GLD: Oh, I don't think we got hysterical. No, I don't think it was overplayed. It was a phase that disappeared right after the war—and the coming of the 4L was quite helpful.

ERM: Had there been any labor organization in the logging camps prior to the IWW?

GLD: Not of any importance.

ERM: What had been the areas in which the unions operated? Wages and hours; improved living conditions?

GLD: I don't think we had much unionism until 1934 or 1935 when the AFL decided to organize the woods and mills.

ERM: Can you tell us about some of the more important standing committees of the Congress and what their functions were? How their reports were implemented?

GLD: The committee that I had quite a bit of contact with and of which I was chairman was the spark-arrester committee. There was a great need for improvement in spark arresters. At that time most of the equipment was using wood for fuel. Then as better transportation came along there was change to crude oil in the machines, and that cut down some of the fire hazards. So the use of spark arresters was less important as time went on, and we found out another very practical way to lessen the hazard from sparks was to put larger boilers on the machines so they wouldn't be crowded. During the fire season, it was very effective to take the exhaust out of the stacks and leave only the natural draft, so that you weren't forcing sparks out of the stack. You see the first donkeys were very much underpowered as to boiler capacity, so they were crowded to the last limit. Then as there was a need for more power, the manufacturers suddenly got wise and built larger boilers with an extended firebox where you could put more fuel and get more heat that way. But the Congress was quite helpful in encouraging the design of better equipment and calling attention to this high hazard of fire from sparks from donkey engines.

ERM: Well, how did these special committees function?

GLD: We made studies and then made an annual report to the Congress.

ERM: How were the expenses of committee members handled in making their studies?

GLD: It was all donated as far as I know.

ERM: Each one of you donated your time as a service to the Congress?

GLD: Well, the company that we represented paid the bills.

ERM: Well, now in your case you were with the Forest Service for a good deal of this time.

GLD: I think they probably paid my expenses on projects of this type.

- ERM: Did the pressures for study of the fire problem during the twenties, when you were with the Forest Service, come principally from that agency or were the owners of timber equally or more active in seeking action?
- GLD: Yes, the timber owners were definitely interested. As I said before, most of the regulations that the Forest Service put into effect were already being used by loggers who were trying to solve the problem as best they could.
- ERM: This was a period in which the organized fire-protective associations were already pretty well set up, wasn't it?
- GLD: Yes, but it was a period when increased interest was shown in forest fires. Probably the biggest step toward better fire protection, which directly affected logging operations, was the discovery in 1921, by two men, Bush Osborne and Julius Hofmann of the Forest Service, of the effect of relative humidity on the behavior of fire. Prior to that time nobody connected moisture conditions in the air with the spread of fire or the danger of fires starting. And after their report was made in 1921, there was immediately more interest shown, both in the matter of forest-fire fighting and in the prediction of dangerous fire weather.

Regarding the Hofmann and Osborne report: in it was cited an example of what a lack of knowledge of the behavior of fire in critical weather could mean to the spread of fire. In 1921, in order to burn slash before the summer ban on setting fire went into effect on June 1, the operator in the Cedar Lake watershed set fire to the slash on May 30. By the following day, the fire had spread into green timber, destroyed eleven donkey engines, and many million feet of down timber. On June 1, the fire suddenly stopped spreading and was readily controlled. What was thought at the time to be an act of God, turned out to be man's dumbness. A study by Osborne of weather records of the day of the fire showed that on May 30, when the fire was set, the humidity was at a critical point after a day of dry east wind. On the thirty-first, it dropped to below ten percent—thirty percent now being considered the danger point. On June 1 the wind switched to the west and the humidity rose rapidly.

As the role of moisture in the air (humidity) was understood, immediately advances in fire weather forecasting, and taking extra precautions when humidity got low—such as our present day shutdowns and hoot owl schedules—came into effect. Even fire-fighting techniques changed. The Pacific Logging Congress was used to spread the gospel of fire prevention.

Another topic in the early Congress was its relationship to the various forestry schools. After the logging courses became established at Oregon State and Washington, members of the faculty appeared on the programs frequently, discussing technical subjects. The Congress was quite effective in bringing to the attention of industry that there were schools turning out men of high caliber. And today those men are very highly accepted and desired in the industry. You see a lot more forestry graduates in positions of trust today than you used to. The Congress was very helpful in bringing this about.

Another of the accomplishments of the Congress has been to provide a forum for discussing new trends and new equipment. As we came into more rugged terrain it was necessary to use more mechanical equipment, heavy equipment especially, and the Congress was a good forum where

¹⁰ U. S. Department of Agriculture, Forest Service, *Relative Humidity and Forest Fires*, by J. V. Hofmann and W. B. Osborne (Washington, D.C.: GPO), 1923.

¹¹ "Hoot owl schedule" refers to beginning work as early as possible in the morning in order to get a day's work done before low humidity forces a shutdown in the heat of the day.

new ideas could be brought out. We had some harebrained thinking; but we'd screen that out. You don't see any discussions today on balloon logging—we even had papers on that in the past. The trade journals, of course, were doing their part at the same time.

And from time to time the Congress has conducted a machinery show. That generally happens whenever the Congress goes to Seattle because there are very good facilities there. It's a very costly thing for the manufacturers. Today, however, with the trend toward mobile equipment designed to be used on truck roads, it is less expensive to put on a machinery show, and the displays at the regional conferences also are excellent.

- ERM: In the early days of the Congress they used to have some pretty high and wild old times when they got together, didn't they?
- GLD: Oh, some of us old birds were younger then and I think we were possibly a little livelier. Men were a little bit more earthy in those days compared to today, less worried about cigarette brands. We hadn't been softened by TV and things of that kind. Another influence we have today is that more men bring their wives to the meeting and that sometimes has a good effect and sometimes unfortunately a bad effect.
- ERM: What are some of the bad effects?
- GLD: Well, not bad effects, I think age changes one's viewpoint. Some of these younger birds don't know all the angles that some of the old-timers did. I have never seen the present generation playing roulette with a bull block at a machinery show, as I did once in Seattle.
- ERM: What are some of these angles that they younger ones might profit by?
- GLD: I wouldn't want to give any advice on that point because I couldn't qualify as an expert in the first place, and it's just as well to let the past rest in the past. You have to have a little nostalgia, you know, to think back.
- ERM: Now one thing that I wonder about is this: were the program and the policies of the Pacific Logging Congress made by the rank and file membership, as something pushing up from the bottom, or were they conceived and articulated by a relatively few men who were the leaders of the Congress?
- GLD: I think, to be honest, any organization that is as loosely knit as this organization is, has to depend on leadership from a certain more or less select group. When I say "select," I don't mean any aristocracy but people with some background on what it's all about. There has been a tendency to bring into the affairs of the Congress, younger men all the time. I would say today probably the officers are a younger group than they were thirty years ago. The policy was established years ago of a man serving only one term. But the officers are not elected by the rank and file vote; they are selected by a caucus of people that know the qualified men from all areas of the Congress. The president has probably served some time on the board of directors. That's a pretty practical way to run it. You couldn't run it any other way.

And there has been no railroading; there have been no politics to my knowledge. Nobody ever gets any pay for anything—the only one who gets paid is the secretary. We've kept out of politics because we've got people of all parties, and we've got this international background. If we thought the Congress should be advised that some things were not to the best interest of the industry, we didn't hesitate to say so. But we never took sides in a political campaign, it wasn't our function. That's why we kept away from a lot of pitfalls.

ERM: Do you ever remember there being any conflict within the Congress between members from different areas?

- GLD: No, nothing critical. We tried to keep that out. That's why the resolutions committee was always pretty cagey about the resolutions.
- ERM: To what extent did the emergence of the regional conferences reflect a feeling of special needs on the part of the people who sponsored them? Was there a tendency to feel that perhaps the Pacific Logging Congress didn't deal specifically enough with the peculiar pro'"Hems of a given area, and therefore there was need for a regional conference?
- GLD: I think the answer to that is that as the industry has grown and the attendance has grown from a few hundred into the thousands, we realized that we didn't have time for a lot of grass-roots discussions. We're getting back to some of that. The panel this morning was a good panel that way. In this panel, which I've had the pleasure of heading up for three years on "What's New in Logging Techniques," it brings some of that grass-roots thinking back into the picture which kind of crept out a few years ago.

But as the industry developed in Oregon, the Inland Empire, and northern California, it was felt that there was a need for local meetings to discuss local problems. Instead of saying we didn't like it, this is going to take away the influence of the Congress, we went along with it. We thought it was good. We tried to help them out with advice and the secretary of the Congress worked with them and with the members of the various groups. The regional presidents are exofficio directors of the Congress. It's been a very fine movement. We decentralized it, brought it down to the local areas, and it hasn't affected our membership at all. We know it's been very helpful because the problems in the Spokane area are quite different from the problems down in the redwoods, for example. And it has also made possible the development of men, who have demonstrated their ability to be leaders in those areas, to become leaders in the Pacific Logging Congress.

- ERM: Was the membership of the Congress as a whole as interested in the professional status of logging as were Cornwall and English, O'Hearne, and others, or did they regard the practical information they could get from attendance at the Congress as its most important aspect?¹²
- GLD: I think in the early days it was recognized that there was a need for some kind of clearinghouse for information on the problems that were confronting the industry. And that was the basic reason, I would say, that the Congress came into being.
- ERM: In other words, they were concerned about practical problems and their solution, rather than winning any public recognition as professionals.
- GLD: The logger, in the early days, certainly never worried about public recognition. When he came to town, people knew about it. And in the West his was the important payroll. It has only been within the past ten years that the logger has realized the need and the value of good public relations. The coming of other forms of industry to the region has lessened his economic importance, and the recreation or nature lover wonders if he is a desirable citizen. Getting back to your question, the Congress was formed to further the interests of the logger in a rapidly changing industry that was fast becoming more mechanical.

One of the committees I failed to mention which I also served on, and which has been very helpful, was the communications committee. It couldn't have started without the background of some organization like the Pacific Logging Congress. If we hadn't set up that organization and seen to it that the logging industry got its rights in radio communication, we'd have been out on

_

¹² James O'Hearne, English Lumber Company, Mount Vernon, Washington.

a limb, because the number of channels was getting smaller and television was crowding into the picture. A lot of industries, like the oil industry, were grabbing the channels and if we hadn't banded together and made a valiant fight of it, we wouldn't be where we are today. We had quite a job selling the rest of the country—I mean the South and the East—on that thing.

ERM: Who were the front runners in that particular move?

GLD: Bob Olin was very instrumental, and Whis, and quite a few others. 13

ERM: Emmit Aston had a part in that, too, didn't he?¹⁴

GLD: Yes, but Emmit's interests are widespread. He has been most helpful to our industry in leading the fight to see that the logger gets a fair shake on the public highways. To the average motorist, the logging truck is the biggest menace on our highways and the most destructive. Through studies by competent engineers, the state highway people have been presented with facts, rather than hysterical statements, and so impractical regulations have been avoided or modified. The industry itself has been awakened to the need for policing its trucks and giving consideration to other travelers on the highways.

ERM: Policing to see that they do not overload their trucks?

GLD: That's right. And to try to be a little more courteous to the other people using the highway and things of that kind. That, you might say, has stemmed again from the Logging Congress and the regional conferences.

ERM: What can you say, George, about the relationship between the Congress and other organizations here in the West, for example, the Western Forestry and Conservation Association?

GLD: That's an organization that is mainly concerned with forestry matters proper, like fire protection, better silvicultural practices, and forest disease. We have given a fair share, I'd say, of the programs of the Congress to some of those very problems. But basically they are two different organizations, two different lines of thinking. We haven't encroached on each other's field much. Membership in both is common, but at the same time the Western Forestry and Conservation is a meeting place of all of those interested in forestry problems—the state governments, federal governments and agencies, and the schools rather than the loggers.

ERM: Would you say that the Western Forestry and Conservation is representative of a wider group within the forest-related community?

GLD: It is not concerned about production, it is concerned with the growing of trees and the protection thereof while the Logging Congress is more concerned with getting logs out of the woods. The dollars and cents earned by the loggers pay the bills for conservation. As the value of timber on the stump has increased so has the interest in securing a new crop and protecting the old.

¹³ R. W. Olin, Potlatch Forest, Inc., Lewiston, Idaho, and Arch Whisnant, secretary, management committee, Pacific Logging Congress, Portland, Oregon. For more information on Mr. Whisnant *see* typed transcript of tape-recorded interview conducted by Elwood R. Maunder and George T. Morgan, Forest History Society, 1958 and 1960.

¹⁴ Emmit R. Aston, logging manager, Biles-Coleman Lumber Company, Omak, Washington. For more information on Mr. Aston, *see* typed transcript of tape-recorded interview conducted by Elwood R. Maunder, Forest History Society, 1958.

- ERM: Then what would you say about the relationship between the PLC and some of the manufacturers' associations, like the National Lumber Manufacturers Association.?
- GLD: There again we find different problems. The NLMA is concerned with the manufacture of forest products and the sale of them, and it is interested in things that apply directly or indirectly to the manufactured product. We know that any taxation programs that are detrimental to the industry are going to hit the loggers as well as the mill men, so we have been interested in problems like this which are mutual. But the Congress is not a trade association.
- ERM: But there has been liaison between these groups?
- GLD: Oh yes. For instance, I've been president of Western Forestry and Conservation Association and I was president of the Society of American Foresters which has nothing to do with the Logging Congress; at the same time I've been on the National Lumber Manufacturers Association forestry committee since the thirties, but there is no conflict.
- ERM: Is there a good deal of overlapping of membership?
- GLD: Yes, because many of the people are interested in all phases of forest use. You just can't get away from it.
- ERM: About 1923 you shifted over, George, in the Congress from an organization that was pretty much on a shoestring budget and dependent upon volunteer help, to one in which you had a paid secretary and paid staff as Cornwall gradually faded out of the picture and Whis came in.
- GLD: Yes, George had done it as a voluntary job. I doubt that he got any pay out of it.
- ERM: Was this something that Cornwall himself wanted to do, or did he step out reluctantly?
- GLD: No, I don't think so. I think George was broad-minded. He was getting along in years and he had plenty of activities to take care of on his own magazine. It was felt that the Congress was getting big enough so that it needed somebody to take it over as a full-time job because one of the duties of that job is to maintain, throughout the year, a liaison with the industry. He is the contact man that gets around and tries to find out some of the things that are of interest, to get ideas for the programs and also to keep interest up so the member ship stays up. It isn't a profit-making organization. Hell, we 've had lots of years when we had to borrow money to keep out of the red, to pay our bills. Some of it has been done on personal loans by individuals in the industry, not from any company. But we've kept afloat.
- ERM: Was that particularly true during the Depression years, all through the early thirties?
- GLD: Oh, definitely, yes. But we never missed a beat, we didn't miss a meeting. Every time we'd get broke we'd hold a meeting in Portland to make a little money.
- ERM: Why was that? Because more people could turn out?
- GLD: Because it didn't cost so much to run the Congress. No travel expenses for the officers and Portland is in a more reasonable area for a meeting than San Francisco. If you have a meeting in San Francisco, you've got to realize that it's going to cost you a hell of a lot of money.
- ERM: Has the Congress always made a practice of paying the traveling expenses of its officers?
- GLD: Only the secretary and the staff, not the officers. No, I never got a nickel for travel.

- ERM: Tell me a little bit about Whisnant. Here is a fellow who has been a colorful figure in the Congress's history.
- GLD: Whis has been a very wonderful man for the job. He had a background as a newspaperman. He is a very lovable character. His heart is in it and he has done a beautiful job. He had a lot of good, fatherly advice from people who knew the value of a dollar and kept a close check rein at times on Whis.
- ERM: What recommended him to the governing body of the Congress?
- GLD: Well, Whisnant had shown an interest in our industry, and we were looking for somebody with personality that could organize a meeting like this. Whis has done that.
- ERM: Would you go along with what Toby Moore, the keynote speaker, had to say today in naming the three great foresters of American history?¹⁵
- GLD: E. T. Allen had a lot of influence, especially in the field of forest protection.
- ERM: Now E. T. Allen, of course, was with Western Forestry and Conservation, wasn't he?
- GLD: That's right. E. T.'s influence on the Congress was that of a friend. His contacts with the industry were more with the principals, rather than with the loggers.
- ERM: He had very profound impact on the whole course of forestry out here.
- GLD: Oh yes. He was largely instrumental in getting Charlie McNary interested in forestry legislation. For example, the Clarke-McNary Act—E. T. wrote most of that. 16 Bill Greeley helped with some of it. But E. T. did have the principal influence. Western Forestry was the first organization that ever headed up good, clear thinking on forest matters and protection, and forestry laws. It was a clearing house for all these agencies out here. That's what it still is.
- ERM: Looking back, George, over the time you've been associated with the Pacific Logging Congress, who do you think of, besides these men that you've already mentioned, as being most influential in the whole picture of its history? And why?
- GLD: Well, Frank Lamb of Hoquiam, Washington was a very scholarly gentle man with a very brilliant engineering mind who contributed to improvements in logging equipment. He was never an officer of the Congress, but he was a regular attendant. George S. Long, Weyerhaeuser's western manager, played a very minor part as far as the Congress was concerned, but he did have strong influence on the whole industry—a very wholesome effect. He and Mark Reed worked hand in hand on a lot of things. J. J. Donovan with Bloedel-Donovan Lumber Mills, Bellingham, was a very brilliant man who had a background as an engineer, and was very interested in the Congress. He served two terms and was deeply interested in the development of engineering phases of the Congress. E. T. Clark, who was one of the first professors of logging engineering at Washington, never was a member of the Congress officially, but he had a lot of influence in developing the engineering aspects of it. George Peavy, dean of the School of Forestry at Oregon State, was a much stronger character than Hugo Winkenwerder, dean of the College of Forestry, University of Washington, and was very much interested in the participation of the school faculty

¹⁵ A. G. T. Moore, retired traffic manager, Southern Pine Association, named William Greeley, E. T. Allen and Arch Whisnant as outstanding men in American forestry.

¹⁶ Clarke-McNary Act of 7 June 1924, ch. 348, 34 Stat. 653, 16 U. S. C. Secs. 471-570 (1964).



W. C. Ruegnitz



S. A. Stamm



E. T. Allen



H. Winkenwerder



A. Whisnant



E. G. English



J. O'Hearne



G. W. Peavy

in the Logging Congress and in placing his graduates in private industry. R. W. Vinnedge, who was with North Bend Lumber Company, North Bend, Washington, took a great interest in the Congress. He was a Yale man and industry's most able spokesman. Dave Stewart, of Knappa, Oregon, was president of the Congress. Made a very good one as I remember. Charlie Cowan was never a member of the Congress, he was in fire protection, but he always took a great interest in it. Orville Miller, who was president of the Deep River Timber Company in Portland, was very active in the Congress. He was a very aggressive type of individual; made a very good president. He had his own company toward the end. Bob Filberg of British Columbia is a live wire and has done a lot of good work. Edward Stamm, vice president of Crown Zellerbach in Portland, of course, has always been an outstanding leader. Fred Brown with Cedar Logging Company, Ltd., Vancouver, represented British Columbia and was a very excellent man. Truman Collins, president of Collins Pine Company, Portland, was very effective. He took a great interest in technical affairs. He presented a very wonderful report on truck roads about the time they came in. Roy Morse, who was vice president of Long-Bell Lumber Company in Longview, Washington, has always been a very fine supporter of the Congress. Roy is a delightful personality and takes a great interest in things. Emmit Aston did a very fine job,. of course. Bob Dwyer of Dwyer Lumber Company, Portland has been very helpful in the Congress. He has been watching the purse strings of the Congress.

ERM: A good business manager?

GLD: That's right. And the rest of them are just about the same. L. T. Murray, Sr., president of West Fork Timber Company, Tacoma also took a great interest in the Congress. It was quite a hobby with him. His son is the only one who ever succeeded his father as president.

INTERVIEW II, SESSION 1

Charles S. Cowan and George L. Drake Hood Canal, Washington September 9, 1961

Elwood R. Maunder (ERM): What we want to do today is plug some of the gaps in the earlier interviews we made, and I think we should start off by talking about the work that you two men were engaged in back in the NRA days.¹⁷ Will you start off, George, and give us your outline of the subject?

George L. Drake (GLD): When the NIRA¹⁸ was being written under pressure from Franklin Roosevelt, we knew that special emphasis would be given to management of forest lands, and if industry wanted legislation they could live under, they needed to show some leadership. Accordingly, the National Lumber Manufacturers Association in Washington, D. C. wrote to all the field divisions in the different forest regions telling them what was ahead of them and suggesting that they come up with a definite program under which some of these objectives could be obtained and at the same time the forest industry could survive. In response, the West Coast Lumbermen's Association in cooperation with the Pacific Northwest Loggers set up a small committee to present a program to these two major groups. As I recall, Charlie, you and I were on that committee along with E. T. Clark; C. S. Chapman was the chairman—and who else?

Charles S. Cowan (CSC): Clair Briggs from Eugene, Oregon.

GLD: He didn't sit in on nearly as many meetings as the rest of us.

CSC: No. Then there was Colonel Greeley, of course, in an advisory capacity.

GLD: But a very important member of the group. Well, we took this very seriously and met for at least two months—once or twice a week—up in Seattle at the Athletic Club until we had a draft which in the course of time was sent back to Washington, D. C.

At the big meeting held in the Department of Commerce Building in Washington, D. C. with all of the groups in the United States present, together with members of the Forest Service, college faculties (a lot of wild-eyed boys), the proposal was hashed over and adopted. The interesting thing, I think, is that of all the regions in the United States, we out here in the Pacific Northwest were the only ones who came out with a concrete program. The rest of them either didn't do anything about it or presented a pretty weak program. As a result, what we had worked out ourselves here in Seattle was adopted as the national program that became Article X.

ERM: George, you implied by your introductory statement that the government, in particular Roosevelt, was threatening some legislative action, and that in view of this, industry was called upon to prepare some plan which could be written into the legislation. Was this, indeed, a threat from the federal government, and particularly Roosevelt, or was it instead, a s others have said, that the economy was at such a low ebb that nearly everybody was pleading for some kind of federal action to help remedy the economic situation?

¹⁷ Typed transcript of tape-recorded interview with Charles S. Cowan conducted by Elwood R. Maunder, Forest History Society, 1956.

¹⁸ National Industrial Recovery Act of 16 June 1933, 48 Stat. 195.

- GLD: I don't think the forest industry was crying for help to any great degree. We did know that Franklin Roosevelt had very decided ideas on forestry matters and regulation. Ferdinand A. Silcox as the chief forester was following out those leads, and we knew very well that there would be pressure on the industry—perhaps more pressure than there would be on the coal industry in which Roosevelt wasn't so interested. I had the impression that he was quite a keen forester himself.
- ERM: But Roosevelt never gave his endorsement to the more radical ideas and programs that Silcox and others projected, did he?
- GLD: Well, that came along after Article X.
- CSC: As you remember, George—and possibly you do too, Elwood—some time afterwards there was such pressure to set up regulation that it caused the quarrel that became rather famous between Alben Barkley and Roosevelt. They wanted certain things which Barkley with his experience in Kentucky knew just wouldn't work out. The pressure for regulation was resisted to a degree in Congress, but I think Alben Barkley's stand was one of the deciding points.
- GLD: Well, that was again a little bit later. I think that anybody who was aware realized that there were a lot of things that could be improved in the forest industry. The thing that we stood for out here was, first of all, better fire protection—a better job on the part of the logger. It was that type of thing that we gave a lot of thought about and wrote into Article X. Charlie gets a lot of credit for that. These were things that were practical, and you could say to an operator if he was reasonable, "This is something that isn't going to hurt you. If you have less fires, you won't have to spend the money for that." On forest practices, we tried to hedge to a point, be flexible. We didn't say you're going to have to pile the brush from every tree. We tried to make it applicable to the different areas. The standards were intended to get reproduction, and we tried to spell out how you were going to get it. That was why our program was sound and why we could defend it.

When we went back to Washington, D. C. (I think Charlie was back there, too), we had these two-day meetings. Colonel Greeley was chairman. We had a general session in the morning and discussion of how we were going to touch the different phases. At noon on the first day on my desk was a note from the Colonel that I was to be chairman of one of the two meetings that afternoon. A. B. Recknagel turned out to be my secretary. There we had the real battle to win these points and crowd out unwise suggestions that were put up. For instance, Bob Marshall, who was very radical-minded although he was born with a golden tooth, proposed an amendment that if an operator had a labor agreement and had any conflict with his labor, the government could revoke his permit and he couldn't operate. Of course, that would have been beautiful incentive to put your competitor out of business by starting a little fire in his camp. We had to fight down that kind of pressure. They didn't argue much about the fire business because they didn't know a darn thing about it, but when it came to theory of silviculture they would have put in a lot of things that just wouldn't work nationwide. We left it so that each area would try to work out a program that would fit its own forest conditions.

After the thing "blew up with the chicken" [Schecter Poultry Case], we maintained the same policing we were doing under Article X, and that was true of many of the other regions, including the South.

CSC: And that's been the basis of the forest protection laws. We carried Article X (such parts of it as we could) into our state legislature. We couldn't get all of it in though. We found the same thing with the state resisting some of it. However, ultimately the provisions of Article X were written into the state laws of Washington, Oregon, Idaho, and California, and it spread all over the country. As I remember, George, with all deference to your memory, and reinforced lately by going over my own records, after the Code was written we took it to the industry, which was at that time in a very, very depressed condition—there just wasn't any market. The principals

weren't feeling particularly bright, especially about laying out money for something that might give them a return in ten or twenty years. But those general things that were necessary for the future welfare of the land (it was then in their possession but it might not be later) got practically no argument and were accepted in the broadest way. There weren't any scraps that I can remember; there were a few questions for enlighten-ment as to what we really meant. I can remember Orville Miller, who was quite a go-getter, saying, "Well, I can't agree with this definition of what constitutes a snag." We were very solidly in the belief that twenty-five feet was a snag. But there was a reason for the questions Orville Miller and others like him put because he was logging in an area where the timber was old and the number of snags per acre was even four or five times what it was in the general area. He would be going to four or five times the expense of his competitors, and he wanted some definition of that. Other people in the same way spoke up explaining how it applied to their interests. Article X, as I remember it, was written so that it was thoroughly flexible because you can't lay down a hard and fast law for the West Coast or Washington state and think that it will apply in Louisiana or Alabama.

GLD: Or something that would work out in Skagit County, Washington might not work out in Blaine County, Idaho.

CSC: That's right.

ERM: You men sat down and wrote a draft of what you would recommend as the Lumber Code of the NRA legislation?

CSC: That was Article X.

ERM: But Article X was just a part of what you composed. What about prices, production?

CSC: The parts leading up to Article X, Article I through Article IX, envisioned and encompassed these things that you're talking about.

ERM: And your small group, including you two and Colonel Greeley and one or two others, were not concerned with the formulation of these?

GLD: Oh, yes, we were.

ERM: Was the Lumber Code that you proposed and on which you were doing some preliminary work primarily to relieve the dire economic situation of the moment?

GLD: No. That just followed the main pattern for all industries. Handling price controls and things like that in the lumber industry wasn't very far removed from what it was for steel or coal or any other product. Where we had to use our heads was in setting up this particular code to handle the management of forest lands for protection, logging, restocking, and all that. What we were charged to do and what we met in Washington, D. C. to do was deal with this matter of lands.

When it had passed in Washington and was going to go into effect pretty soon, the West Coast loggers decided that we should have a series of meetings, call on all the operators little and big, and explain what this was all about. So we had a flying squadron. Charlie was there, and myself, and Chapman.

CSC: Jim Briggs.

GLD: Well, he didn't say much.

CSC: And E. T. Clark and Colonel Greeley.

GLD: The Colonel gave the final summary.

ERM: You followed the same format each time?

GLD: Oh, yes. We got better as we went along; we had confidence in our own stories. We met first in Bellingham with quite a small friendly group. There was no opposition. Then we came down to Seattle and had a big meeting with several hundred. They had a funny look in their eyes but they didn't get up and say so. Then we went down to Grays Harbor and that wasn't too bad. When we went to Portland we were getting into foreign territory, and we began to get questions thrown at us. One of the points was that you had to have portable squirt cans in certain areas. Everybody recognizes it; the state law requires it now. But Everson from the Benson Timber Company got up and just cried his eyes out. "Why, if I do that," he said, "they'll be stolen." And there were other arguments like that. Next we went down to Eugene. There were very few big operators there outside of Booth Kelly in those days—a lot of little independent loggers who hardly had any equipment. It was just a plain hostile group; you could sense it. We had the meeting in the evening in the old Osborne Hotel, and as you went in someone handed you a mimeographed sheet on the topics to be discussed, who the people were, and that it was headed up by C. S. Chapman of the Weyerhaeuser Timber Company. I saw these two gyppos arguing and talking pretty excitedly and I listened in. One of them was reading this mimeographed sheet and he said, "Chapman, the son-of-a-gun. He's sold out to the Weyerhaeuser Timber Company. I'm never going to take The Oregon Voter again." He'd gotten Chapman mixed up with a fellow who was running a local weekly, C. C. Chapman. But it was just a hostile crowd.

ERM: Did you find that the large operators were more receptive?

GLD: They had been doing more of these things, but these little fellows were very reluctant to spend any money. They thought this was just somebody being mean to them. The state laws in Oregon weren't as strict as they are now, of course.

ERM: Did you elicit from these groups some kind of a vote of confidence?

GLD: No. We explained that this was it. It was on the statutes; it was the law; it was what they were going to be up against. These were the reasons, and this was how it should be approached. The Colonel always followed up with a very fine statement. Chapman would lead off; I had some function on logging; Charlie had fire protection; and E. T. Clark had something else. It was quite an effective team.

ERM: Was this done before the legislation was actually passed?

GLD: The NIRA was passed, and then we had to work up these regulations to conform with it.

CSC: That's when we got this Code out and went around to explain it. By this time the interested public, the people connected with the lumber industry, were well aware of what the main function of the NIRA was and that this was a means of supplementing it. Now, what were going to be the specifics? According to George he had a very small part in it, but, believe me, he and Chapman and Colonel Greeley really wrote the main part of it. I had the forest protection part of Article X.

GLD: Well, that was a lot of it.

CSC: George, you can correct me if I'm wrong, but if that Lumber Code, including Article X, had been enacted into law, I doubt that it would have gotten acceptance without that presentation by men who were known in the industry. They knew what they were talking about and were there to answer the questions, to explain what had led to these things and the ultimate goal we were aiming at. True, it met some opposition, but also enough acceptance that when the NIRA died

(struck by lightning grasped in the claws of the eagle that killed George's chicken—the famous chicken act [Schecter Poultry Case 1]), within a month I was invited to a meeting of the interested people of the West Coast lumber industry. They wanted to keep the Code alive because it was good. They'd had a little experience. They knew they could live with it; they knew what the results would be; they could see ahead; and they not only wanted to accept it but they wanted to make it law. Even though it was not sustained in the federal courts, it could be enacted at the state level. And that was done. The Forest Practice Act which came out seven or eight years later in Washington state, with minor changes to allow for the passage of time, was in essence the thing that was proposed in the Lumber Code.

GLD: This period that Charlie and I are talking about, when this thing was formulated, was August 1933. I know because I lost a boy about that time. I think our meetings in Washington, D. C. were held in January. Then our meetings up and down Oregon and Washington state were held right after that in the late spring of 1934.

After we had set up this thing, the industry throughout the country realized—although in a big measure we led the parade again—that this was going to require some policing by the industry itself. The way to do that (we surely didn't want the government to do it) was to set up an organization headed by a competent man who could inspect the operators and offer technical help. We all agreed that Russell Mills, who was teaching logging engineering at the University of Washington, was a very level-headed man with a background the industry knew about and respected, and that he could probably do the best job of anybody. We decided before we definitely offered the job to Russ that we should talk to Dean Winkenwerder, who was :head of the School of Forestry, so we arranged a luncheon at the Washington Athletic Club. We described the set-up of Article X and the need to put the industry in a strong position by having an able man to administer it—look after its enforcement and advise the operators how to do a better job in the woods. We explained that it needed a man with ability as a logger, someone the industry could respect, and that the man we had in mind who filled this bill was Russell Mills.

The poor dean was quite taken off his feet, but after he got his wind he said, "Well, what am I going to do?" Well, we had a happy thought ahead of time because during all these series of meetings from Bellingham, Washington to Coos Bay, Oregon we'd had a very interesting visitor at every meeting—Kenneth Pearce. He had returned to the States from a job in India and was looking for a job at the University. So when the Dean asked what he would do, some of us brought up the point that with the increasing interest in tropical forestry, any forest school that had a strong department in tropical forestry would have quite an advantage. We told him there was a man available who had had experience in tropical forestry and was a graduate of the Washington forestry school and would probably be just the man for the job. The Dean kind of brightened up, and the result was that Ken Pearce became the professor of logging engineering at Washington. He's has been there ever since and has done a good job. I don't think that we've ever told Ken about this.

Russell turned out to be a wonderful choice and held the job for quite a few years until he had a chance to head a big development in British Columbia. In the meantime he had brought Warren Tilton in as one of his assistants because we had several foresters under this head man in different regions. When Russell left, Warren Tilton took over and did a very fine job, and when he passed away, Bill Hagenstein took over.

ERM: This was the birth of the Industrial Forestry Association?

GLD: Not at that time. This was a joint committee of the West Coast Lumbermen's Association and the Pacific Northwest Loggers, and it continued for years and years with different members in an advisory capacity. It didn't develop into the Industrial Forestry Association until many years afterward when some members of the West Coast Lumbermen's Association who had no timberlands objected to being assessed so many cents per thousand to support this forestry

program. It was decided that instead of having a joint venture of the two, they would set up a separate organization known as the Industrial Forestry Association and not tax people the two cents or whatever it was per thousand. The people who were supporting industrial forestry were the people who had lands and were definitely concerned. I think it strengthened the organization because it eliminated dissension.

- ERM: Was there a similar history of this kind of action stemming from other trade groups like Western Pine Association in its region?
- GLD: Western Pine set up the same type of management we did here.
- ERM: At approximately the same time?
- GLD: Yes, and so did Southern Pine. I think those are the three main groups who set up a real forestry staff. All three of those groups maintained it after the demise of the Code, which shows me that the things we set up originally were entirely sound or they wouldn't have been carried on to this day. As Charlie has brought out, the influence can be seen in every forest protection law in the nation and also in the forest practices.
- ERM: What was the relationship then between this organization that you've been talking about and other established organizations which were particularly devoted to forest protection work such as the Washington Forest Fire Association that you headed, Charlie, and some smaller groups in other areas?
- CSC: Fundamentally they were supported by the same people. Silviculture would be entirely useless, for instance, if every year we burnt over the acreage. Consequently silviculture and forest protection ran hand in hand. Protection was the primary value, and the other was bringing the timber to harvest. It was really two separate organizations of the same people, part aiming one way and part aiming another way but both in the same direction.
- GLD: I can explain it this way, Charlie. There's no conflict. The interest aroused in fire protection through Article X strengthened your organization. The effect of Article X was on the individual—to have better equipment in his own operation and to take more care. Charlie's organization stepped in when there was the bigger problem of fire protection: lookouts and that sort of thing and handling fires when they did occur. Article X was intended to put teeth into doing the things that each operator had to do himself.
- CSC: That's pre-fire prevention.
- ERM: How were these self-imposed regulations of the industry enforced by organizations? How did you get at those who were slow or opposed to doing what you were setting down?
- CSC: In the first place, of course, they were under federal law. In the second place, the next session of the state legislature enacted them into state law.
- GLD: A lot of it was educational—contacts and example.
- CSC: The inspection aspect of the job was a matter of going out, inspecting and talking with people when they were not living up to the regulations which they themselves had imposed. In many cases the big factor in getting acceptance was saying, "This is your regulation; this came from here, from your own people."
- GLD: Another very effective way was through books and instructions on good forest practice and good fire protection which Russ Mills and others immediately prepared for particular areas—something they'd never had before. They were written in a way that people could read and understand, and

they were effective coming from their own people and not some government agency who said they had to do it. Charlie helped write a lot of these.

CSC: They became the most effective thing because they told not only what was necessary to be done but why and what the result was if you didn't.

GLD: Those books were well illustrated and well thought out, as I recall.

ERM: Did you overcome then the opposition that had originally shown itself in Eugene, for example?

GLD: Slowly. Those things don't happen overnight. As Charlie said, this was the great incentive for strengthening the state laws. That was our goal all the way through—to do these things on a statewide basis where they could be practical and fit our conditions instead of on a national basis. What works here won't work in Maine.

CSC: Where we found things weren't going to work out in spite of what we thought and projected, we had our own state legislature meeting every two years, and we could talk with the legislators and get things amended if they were wrong.

GLD: And to the credit of fellows like Charlie who have carried the ball in the state work, there wasn't an effort to throw the whole book at them in one year."Let's get first things done first, " and when they proved workable, "Then let's go on," and that's the way the thing developed.

ERM: Where was the first such state law written? In Washington or Oregon?

CSC: Washington, I think.

ERM: That must have come about 1935.

CSC: The session following the invalidation of the NRA was the first approach to the legislature. We did not get our full program through, but we did get it started; we got the primary part of it—the forest protection end of it and fire prevention. Fire prevention, of course, was the most readily proved thing. If you didn't have fires, you didn't have to pay for them; you didn't have any losses. They began to think perhaps we knew what we were talking about, that we weren't just visionaries. Consequently these proposals got wider and wider acceptance, and when we came to the next step it was nowhere near as difficult as the first time.

GLD: This little thing that began with our meetings at the Athletic Club was the germ of so many things which have gone into fields that nobody ever dreamed of. For instance, the tax problem. As Charlie said, when people in the state governments saw that we weren't wild-eyed and were working for some sound things in fire protection and forest practices, we were then able to talk about the tax problem.

ERM: Would you gentlemen agree then perhaps that industrial forestry on this continent got its real birth (not necessarily its first signs of emerging but its real birth) out of this Depression situation and the NRA Code?

CSC: No. I think it had been coming; it was talked of for years.

ERM: Did it accelerate its growth very sensationally?

GLD: Well, I think it put industry on the defensive.

CSC: Industry now felt for the first time it was able to take these forward steps. Of course, when you're talking about industrial forestry I gather you're not talking about the Industrial Forestry Association.

ERM: No, in a broad sense.

CSC: I think it would be safe to say it was conceived in that period and the birth came later. I think possibly the biggest acceptance of all these measures came out of practical experience. The other thing, I think, that helped us to get those things into law was the fact that never once did I find that industry, while they were asking for things to be done by their own members for the good of the state and the industry itself, evaded their own responsibility. Never once did they say, "Well, if we do this, we should get favored treatment," which other industries were doing. Farm support was not the only one. Coal, oil, and other industries got special favored treatment, but never once did the lumber industry say, "If we don't cut so many trees we want to get so many dollars for taking our acres out of production." We didn't want special favored treatment in the form of taxes; all we wanted was the question of inequitable taxes solved; we' were willing to pay our just taxes. And when they were lined up and considered by the taxing parties, I think pretty generally the arguments employed and presented were shown to have a great deal of merit. We did get some improvement in those things.

GLD: I think the industry was coming of age at that time. We realized that being an exploiting business—cutting trees down which people don't understand have to be cut down just as grain has to be cut down—we had to take a positive stand. We couldn't just sit back and be crucified. We took what I think was a forward stand in saying, "Sure, we've got some obligations, and we're going to try to accept them." From there on that's been the attitude of industry: instead of being pushed into things, taking the initiative in doing things that were right and good for the general public. Out of that has grown a pretty strong national leadership in industry.

ERM: How much of a leading role was played by NLMA and APPA [American Paper and Pulp Association] and other trade groups on the national level?

GLD: APPA came in afterwards as part of the need to tell the public what industry was doing, but the leadership in the NLMA was very marked. It was a clearinghouse for these different groups as they came in.

ERM: Who in NLMA was very important in this leadership at that time?

CSC: I think Wilson Compton was very important. At that time he received quite a little aid from E. T. Allen.

GLD: Yes, but he was forestry minded, and I think very helpful. Then there were a lot of fellows like Chapman, who was very strong.

ERM: You're speaking of C. S. Chapman?

GLD: And Marc Fleishel, who just died recently, took a great interest. Then there was C. C. Sheppard of NLMA. He was head of the forestry group that met in these meetings in Washington, D. C.; he was the industry representative. He was from down in Texas. There was real strong leadership.

ERM: What was Bill Greeley's part in all this?

GLD: Bill Greeley was the power behind the throne because everybody respected him. His influence on men like Sheppard and Fleishel was very marked because they had confidence in him. So did government officials even if they disagreed with him.

CSC: He was also very well known and widely respected by members of Congress because he had been chief forester just a comparatively few years before.

ERM: Did you have any opposition to your activity at the state level?

GLD: Some.

ERM: Would you summarize this discussion, Charlie, just as you see it?

CSC: My thinking is that there are very few people who seem to understand why we have gone ahead in forestry as we have. They don't seem to realize that all the steps that we look upon now as the necessary, practical steps were initiated by the industry itself. They were not imposed on us by state government, which had the power. They were proposed by the industry and taken to the state government. Once we had laid the foundation and had taken those forward steps, we found that government was following. Whatever they have accomplished, and they have accomplished a lot in late years, has been simply because industry took steps to develop forestry, certainly in these western states.

GLD: I think one of the unfortunate things is that too many of our people who are at present handling the forest industry don't realize that these things which are now a matter of law, came about through the initiative of the industry itself. Through good leadership at a very critical period, under the stress of economic conditions and an administration in the White House that was not too friendly to our industry, they took it upon themselves to do a good job and try to correct these things. Industry has to get out and take the lead if it's going to keep abreast of these things and not be dominated through impractical legislation. They can't sit back and say they don't like it. They've got to say, "This is what's got to be done, only we hope it'll be done in a practical way that people can live with and prosper."

ERM: Now, these steps took place during the middle and late thirties, right?

GLD: That's right.

ERM: This was a period of great economic unrest and trouble. The threat of government regulation was a spectre before all industry. Before the thirties there was another period of much greater prosperity and a political situation which was dominated by a conservative element in federal, state, and local government. Do you fellows who lived through that earlier period see any basis there for this leadership or for this enlightened step which you say industry took in the thirties, or was the action that came in the thirties the result of economic disaster and the threat of regulation?

CSC: As I see it the influence prior to the thirties was the pattern of land ownership. In Washington and Oregon different landowners, some of them with small acreage, were competing in the open market to get back the dollar they had paid for stumpage before it was eaten up by taxes. There was a lot of land being independently logged. It was not a stable ownership. Until that pattern changed, we couldn't expect to develop forestry. The economic pressures of the late twenties and up to 1937, 1938, 1939 and 1940 were such that many small owners gave up a lot of the land. Over 600,000 acres in western Washington reverted to the state, to the county. It was much more, as a matter of fact. That took the unstable ownership pressure off, but up to that time stumpage here was not getting its worth. For instance, in working out timber sale prices, as I had to do at times, we used to come up with a minus quantity on hemlock and balsam, and the result was that we had a debased price of stumpage. We couldn't pay a man for taking out timber at a loss so what we did was to take the cost off the price of Douglas-fir. After stumpage began to achieve its fair value and hemlock came into the picture as a saleable article with the manufacture of the various pulps and papers, we were able to move into sounder economic conditions. That helped in that it froze out unstable ownership.

GLD: Also growing was the realization that there was a future for the industry if given proper fire protection and proper management, and that made the owners a little more responsive. The enactment of better fire protection laws and the strengthening of the state forestry departments all helped. It was a transition period. We were going from "cut and get out" to thinking in terms of stable ownership, and I think that was the reasoning of some of the people who were supporting us in setting up these forest practices and getting Article X started. It was greatly to their credit.



Charles S. Cowan, leader in forest protection work in the Pacific Northwest.



1937 photograph of fire tower in Washington state.

INTERVIEW II, SESSION 2

Charles S. Cowan and George L. Drake Hood Canal, Washington September 10, 1961

Elwood R. Maunder (ERM): How many years now has each of you been in the field of forestry?

Charles S. Cowan (CSC): Well, with me as of now it's fifty-three years, if you count active years.

George L. Drake (GLD): Fifty-one.

ERM: Together you've got more than a century of experience behind you in this field, and I just wonder, out of your life's experience in forestry, what single things loom up in your minds as being of the greatest importance?

GLD: Charlie, you lead off.

CSC: I would think the realization of Schenck's dictum that "that forestry is best which pays best." I think the economics of forestry came of age and that gave the fillip to the movement. In all I would say the big factor was that when the opportunity did arise for forestry to pay its way (pay its share of the taxes, provide employment for long-term investment), the lumber industry, pilloried as it was by theorists—and by some practical theorists—seized the opportunity with both hands. That seems to me the breaking of the economic barrier with bad forestry. We had to get rid of a static growth to develop a dynamic growth, and this possibly has come to full realization in a statement of the Forest Service recently that "cut is now balanced by growth." Yet but a couple of decades ago, they were bemoaning the fact that our cut was three times our growth rate. The breaking of that barrier seems to me to be the big thing in forestry.

ERM: That would be the major accomplishment in the field of forestry in the past fifty-odd years that you've seen it in operation?

CSC: No, I wouldn't say it was the greatest piece of forestry; it gave the greatest opportunity to develop forestry. It had to pay its own way; it couldn't come out of funds that didn't exist. The funds had to be created and they were created by the expenditure of capital and the development of the return. That return became assured, and science took its proper place in the development of forestry. One of the major lumber producers in the company now gets only fifty percent of its income from lumber; the rest of it comes from allied products which are directly part of the lumber industry—pulp and paper containers, presto logs, and all the other things that are being manufactured not only from the stumpage but from what was ostensibly waste growth. It was wasteful because it couldn't be utilized; now it is being used and we see big development.

ERM: Do you see this same trend continuing into the future?

CSC: Oh, I would think so. The history of science shows that once you break down one barrier, you've laid a foundation on which you can build the next step. The next step is easier because of the development of knowledge, and you get two pieces from what was one—a square, as it were—and it keeps on multiplying. I think the future holds far more than the past. I think we've just begun to enter into the field of what we can do with fiber. George has been much closer to the practical side of it than I have at any time.

ERM: How do you feel about this, George?

GLD: I think the last fifty years has been a tremendously interesting period because it meant the coming of age of forestry, of something that was more or less nebulous. If it was practiced at all it was supposed to be practiced only by government in a very crude way. As Charlie has said, it's become a matter of economics that as possibilities developed there was more and more intensive forestry by industry, a lot of it before it was really paying its way. It isn't always paying today but indications are that it can pay its way if it's intelligently handled. I feel that it's been a very exciting fifty years for that reason. I'm not quite as optimistic as Charlie. I don't think we'll make the strides in the next fifty years that we have in the past because we have caught up with Europe pretty much in these fifty years.

Personally, it has been a very satisfying field of endeavor because we could see progress can be made, and always with the thought that anything a forester does in bettering his work and bettering the things he works with is for the general good of a lot of other people. It has a high standard and I try to tell that to the young fellows. It's not just the dollars you get. You've got to have some satisfaction that you're doing something worthwhile and something that people are going to benefit by. At the same time it's intensely interesting and a constant challenge in every field because it isn't a static thing. Each operation is a challenge in itself. It isn't a dull life, and to me that's more important than how much money you get. Forestry is so many-sided that you're not just a straight forester; you're an engineer, or a botanist, or public relations man—selling the public is vital because without their cooperation you don't get fire protection and practical state laws and things like that. I've never regretted that I went into forestry. I went into it just by happenstance like most people do. I was lazy and was sitting on a rock one day and listened to a guy say he was going to take forestry. We quizzed him and as far as we could find it was a continuous vacation paid by Uncle Sam, so I decided I'd get off the rock I was sitting on. It sounded good to me. I never knew very many foresters who were unhappy with their vocation although some of them did change professions, sure.

- CSC: That's why I thought that George could start this off. I've been more or less on the far side of it for many years, on the outside looking in. But, you know, today I can see the things that we dreamed of, and sometimes they were pretty wild dreams of what would happen in the field of forestry, but we've gone far beyond them.
- ERM: Do you see any wild dreams now that you think may be realized in the future in your field as some have in the past? There are some in the field of technology that you've thought of, George, I'm sure.
- GLD: There's continual thinking in the development of better types of forest trees through seed selection. That's something new in this country and definitely new in Europe. They've had these seed farmers in Europe only a few years. It's the same thing that's developed in the farm industry, of developing better grains.
- ERM: In other words, some day in the future we may have hybrid forests the same way we have hybrid corn crops?
- GLD: Oh, we might have particular species that you could afford to do that with, but the trend is, even on the normal species, to use a better selection of seed if you can, especially at the time you spend money to reseed, in order to get quick reproduction. When nature was doing it you didn't pay anything for doing the restocking, but if you put dollars into it you'd better get your best crop back, which I think is an incentive. That ties in with the economics of the thing. In other words, it's a good forest that pays best.
- CSC: And you carry that problem even further with the development and the utilization of the knowledge provided by soil experts so that the right kind of seed goes into the right kind of soil—the development of ways of increasing seed years, which Douglas-fir is very deficient in, for instance. All of these things are part of the program.

- GLD: It's very gradual, and it's got to be proved that it's worthwhile spending this extra money. Again it all ties back into good fire protection. Why spend twenty-five or thirty dollars an acre to reseed if you're going to have it wiped out by a forest fire? When nature was reseeding and it wasn't material whether you got a crop in five years or twenty years, it wasn't so crucial, but when you spend twenty-five or thirty dollars to start with, you've got to carry that cost until you harvest your crop and you'd better be sure that you don't get any fire. Fire control is still the basic thing in forestry. The investment is justified if you've got protection, out of proportion if you've got the risk.
- CSC: If we could get the public to realize that when afire burns over a second-growth area, it isn't burning over a second-rate area. That second growth is twenty years old, and the fire has burned out twenty years of growth. It doesn't help us to say that we are successful ninety-eight percent of the time when the two percent of the time that we are not successful wipes out the other ninety-eight percent. We've got to get better public acceptance of care with fire in the woods.
- GLD: There's no industry that I know of that depends so much on the cooperation of the public. Because our domain is the out-of-doors, the public has entrance, rightfully or wrongfully, to use for fishing or recreation. People constitute one of the greatest problems we have. We are never going to be through with public relations—in acquainting the public with what they can do and why they should do it. Just like Charlie said, it's a matter of taxes and payrolls which have got to be tied in with a continuous growing crop.
- ERM: One of the next major problems to get over then is to satisfy the need for recreational areas in the forests without making it impossible for a stable industry to continue as a stable industry. Is that right?
- CSC: That is one of the problems. It's one of the peculiarities of human nature that we shout to high heaven about the need to create jobs or hold jobs because they are the means by which people are fed and clothed and have their being, and at the same time we find that one of the really big pressures is to take away the land which provides those very things and hand it out, of all things, for pure recreation—solely for recreation. Recreation, of course, is good. It comes when a man has earned his daily bread and has a little left over to enjoy himself with. But if you take away the means to earn that daily bread, there certainly is nothing left for recreation, and yet that aspect of the matter is very seldom considered. We have so many people who want to set aside a multiple-use land area for one single purpose, and yet they do not want any roads, or what is, in effect, the means of protecting that area from fire, disease, insects, or mankind. If you don't allow roads or lookouts through the area, how are you going to protect it?
- GLD: Of course, the disturbing thing in this conception is the very narrow definition of recreation, a particular type of recreation that a very limited number of people want. It's the type of recreation where a man says, "We want a place back in there where we can go and not see any signs of civilization, and nobody has been there before us." Well, that applied to a very limited number of people, and younger people as a rule. Older people can't do that sort of thing. It's a selfish kind of recreation rather than a type that a lot of people can enjoy and that you can develop under this multiple-use theory. Of course, it's most amazing to me and to a lot of people from this country to go to a country like Switzerland, which everybody thinks of in terms of recreation. You can't stay in the valley and look up in the hills at night without seeing lights twinkling, from aerotrams going up, or railroads. Why? So people can go up and enjoy this gorgeous scenery. And the very persons that come back and say that we should have a complete wilderness, will boast of how they went to the Jungfrau. or some place like that. "Well, how did you get up there?" "We got up on a tram." If it's terrible in the United States, why isn't it terrible over there? If you put a tram up Mount Hood, you'd get howls to high heaven.

Another thing that's very amazing is this cry against grazing. It's terrible here, but you go over to Switzerland and there's grazing everywhere and its "picturesque." We had a very interesting story years ago. Somebody protested about the sheepherders being up in a national forest and what a terrible sacrifice it was to let them up in there. Jack Hardin said, "Well, the only thing wrong with that is that we don't make the sheepherders wear velvet pants and learn how to yodel." If we did that, it would be picturesque instead of terrible. But that's the unfortunate thing about a lot of the American public. Their idea of forest recreation is a very exclusive thing for a very limited number of people. It costs a good deal of money and requires youth. You can always take a canoe and get away from the mob if you want to.

- CSC: Oh, yes. Up at Rainier National Park, one of the most beautiful places I know—one of the small national parks, 46,000 acres, you can go 100 feet off the trail or off the road and be completely lost. As a matter of fact, Mount Rainier is only seven or eight percent developed.
- GLD: That's true in the Olympic, also.
- CSC: More than that in the Olympic. Let me give you an illustration, something that happened to an acquaintance of mine. He is a rather wealthy man, a well-established businessman, one of the leaders of our community in Seattle, and he recently made quite an extended trip through Europe, particularly through Germany and England. He took many pictures, some of them very beautiful colored pictures, and he showed them to his friends. He showed us some of the old English and German schools and he raved about their beauty. They were 300 or 400 years old. True, they didn't have all the up-to date things we demand in our schools but they developed an artistic sense and a pride in them in the people who viewed them. Now the reason he made that tour of the schools was that he was interested at that time in running for the school board, a nonpaid public contribution. He was very earnest about it. One of the big things he had in mind was tearing down our local high school and building a new one in its place. It was then twenty-seven years old and in three more years the bonds would have been paid off. It never had a chance, according to his theory, in our own country of ever achieving an antiquity that would add the dignity which he so admired in other places. I spoke to him about it, but he couldn't see any inconsistency in his attitude that we here in this country have got to keep up-to-date. All this aesthetic beauty of which he was speaking didn't matter to us but did to other people.
- ERM: If you could reach the average man in America with a simple statement of what you feel is essential in national forest policy, I take it then that you would try to convey to him the idea that multiple use of our forest resource is a policy that has been rather well established in the fifty years plus that you've been engaged in the field and that its continued application should be the guiding principle in our forest policy. Do I state that correctly?
- GLD: The forest policy of the progressive countries of Europe is definitely one of multiple use—to extremes, even to the extent of going into the forest and raking up the litter for fertilizer or for fuel. It doesn't mean that people don't enjoy the forests and yet practice good forestry, but it is extreme multiple use. They wouldn't consider setting up an area in Switzerland and saying that it was only for people to walk with a pack on their back and no trail. They would say you were crazy if you tried to do that over there. They want tourists.
- CSC: I would in part agree that there are certain areas of unique and remarkable environment that might be set aside for a single use when

that is justified, but I do think that one of the crying needs of the country is to allow the men who have been educated in land management to have some voice in the land management. Otherwise our forest schools are not doing their full job in turning out their graduates. The voice of the forester is not listened to with the amount of respect to which his opinions, by experience of the past, entitle him. Foresters haven't got the voice and yet they are the only trained men

whose voices should, of rights, be heard. The plumber, the baker, and the candlestick maker can band together and by getting the ear of some publicity agency scream to high heaven about something in which they are really not well founded.

- ERM: If you had some word to pass along to the leaders of the forest products industry in the future, what would you want most to convey to them as a group dealing with the broad field of forestry problems?
- CSC: Based on the fifty years that we're talking about, I'd be inclined to say that if they continue the same type of progress, based on trial and experiment and correction of error, we'll do well.
- ERM: George, you've been directly involved in industry. What do you want your successors in the field to know from you as a result of your experience? What do you feel is most important that they recognize out of the last fifty years' experience that you've been a part of?
- GLD: I should think, to continue and try to improve the forest management technique; to grow better timber in the shortest practical time on the lands for which you are responsible, in a manner that will be sound economically, that will pay its way; to recognize the interest of the general public in the use of lands; try to honestly fulfil as many of those desires of the public as you can practically. At the same time take a firm stand when necessary on measures that are definitely detrimental to the future of good forestry and which in turn seriously affect the whole economy and security of the country. The forest industry is and always will play a very important part in the economy of the country, especially from the standpoint of national security. That was true in Germany; Germany couldn't have survived as long as it did in World War II if it hadn't been for the materials that came out of the forests of Germany. If they hadn't been protected and available, the Germans would have been much worse off. There are so many things that the general public doesn't know about forestry that relate to war materials, food, and things like that, and any country that is thinking in terms of security should be doing an excellent job in forestry. The public should have that interest as well as the man that owns the land.

INTERVIEW III, SESSION 1

George L. Drake San Diego, California February 22, 1967

- Elwood R. Maunder (ERM): George, there are a few questions that I would like to ask you concerning information you gave in the first two interviews. First, you said that George Cornwall was one of the fathers of forestry education, that he advocated logging engineering courses in the schools of forestry here in the West. You felt that through his publication, *The Timberman*, he did a lot to really influence the course of training in logging engineering. Can you expand upon that a little bit?
- George L. Drake (GLD): I think that George Cornwall was, without question, responsible for the development of the courses in logging engineering in the forestry schools of Washington and Oregon. As secretary of the Logging Congress and being very influential in the Congress, he had a resolution drafted that these schools should be encouraged to teach logging engineering. ¹⁹ If it hadn't been for him, there wouldn't have been the pressure to start these courses.
- ERM: Did he keep up that pressure all through the years?
- GLD: Anything that George started, he never let go of. If he had an idea, he kept hammering away at it.
- ERM: In what other areas do you think he had a great influence on the course of forestry and forestry education? Or the development of the forest products industry?
- GLD: He was interested in the trade associations. As far as the field of education is concerned, I don't think he was very prominent, except that he would occasionally come to these schools and give them pep talks. He wasn't forestry-minded in the sense of being a forester, but he was very much interested in the logging industry or anything that would tend to make it more effective.
- ERM: Would he use his influence to any way to get larger appropriations for forestry schools or education?
- GLD: I don't know.
- ERM: Would you provide a little description of what sort of person George Cornwall was?
- GLD: My first recollections were from seeing him as the secretary of the Logging Congress in the early meetings I attended. Later, I got to know George well. He was a very kindly person. He was inclined to be a little repetitious in his conversation, always harping on things that he saw the industry should be doing in the way of improved logging methods, bringing younger men into the industry, and providing some background of education for them. I think he had a lot of influence until he got older and became senile toward the end.
- ERM: Do you think there was a time when a trade journal editor like Cornwall had more influence?

 $^{^{19}}$ For a copy of this resolution, see Appendix C, page 114.

GLD: Oh, distinctly in the early days. The editor of the rival paper, *The Lumberman*, was really, in my notion, keener than old George was.

ERM: Who was that?

GLD: Harry Potter. As I got into the management end of it, I found that the trade journal people could be very helpful because they were our scouts. They were going around to different operations and seeing things. Particularly in Harry Potter's case, I would say, "I've got a problem here. Now if you see something that you think might be an answer to my problem, let me know." I've had calls from him and jumped in my car and gone down there and got some damned good ideas out of him. They were reporting on what was going on in different part s of the country, and it was very helpful.

ERM: Do you think the trade journal was a more influential institution back in those days than it is today?

GLD: I feel that way.

ERM: Why?

GLD: I think they were getting at more of the little minor problems and doing a better job of reporting.

ERM: They were more personally related to you in the field?

GLD: Well, we welcomed their coming to our camp because we got as much out of them as they got out of us, maybe a bit more.

ERM: Do the trade journals now do that kind of personal job?

GLD: I won't say because I haven't been in contact with them. I can only say what I read in the papers.

ERM: Well, in the latter days of your career in the industry, how was it? Did you feel it was declining?

GLD: I think there was more a tendency to generalize in a sense. For example, young George Cornwall, the son of George, Sr., had a technical education, an engineering background, from the University of California, I think. He was a very bright fellow, but he wasn't as keen as the old man. He wasn't as aggressive. I used to live near young George. He had a car and I didn't. I was riding the street cars, and he'd pick me up occasionally and take me to my work.

ERM: This was when you were in the Forest Service in Portland?

GLD: Yes. I always thought he was missing the boat. If I had been him, I'd have been pumping me for everything I could know, since I was getting out in the camp. But he never did. The old man would ask you questions; he'd drive you crazy some times. He had an inquisitive mind. He had good news sense.

ERM: That journal finally went out of the control of the family, didn't it?

GLD: Yes.

ERM: Do you remember any stories at all about George Cornwall that you can tell?

GLD: No, except he was a kind of nice, bumbling old fellow.

- ERM: You had an association with Edgar C. Hirst back in your early days when you were still a forestry student at Pennsylvania State. Can you tell a little bit about him?
- GLD: He was a state forester of New Hampshire. I went to work for Ed in the summer of 1911, and it was a very enjoyable summer, with one exception. We had a governor, Robert Bass, who was a Bull Moose crackpot and who spent most of his time going around talking for Teddy Roosevelt. He didn't stay home enough to s ign the paychecks, so I was always broke. That's my memory of him.
- ERM: Did the governor sign each and every paycheck in those days?
- GLD: He had to authorize it in some way. Toward the end of the month, I'd be somewhere, expecting a check to pay my bills, and I'd have to move out of this locality and tell them I'd send them the money later on. Probably three weeks later I could send the money.
- ERM: What do you remember about Edgar Hirst in those days?
- GLD: Well, Edgar had just been out of Ohio two years. He was a very delightful fellow to work for and very efficient. I very much enjoyed working there.
- ERM: How did you happen to get employed by him?
- GLD: I applied for work, and being a stalwart son of New Hampshire I had a little preference over other forest students. There was one fellow from up in Maine and another fellow from back in Ohio in the crew.
- ERM: What were you hired to do?
- GLD: We had all kinds of jobs. The first job I had was working in a state nursery pulling weeds. Then from there, another fellow and I were sent to survey a couple of new state forest reservations that had been donated to the state. That was very fascinating work. This boy was from Maine. His name was Eaton and he had gone to school at Bowdoin. At Jeffrey, New Hampshire, President DeWitt Hyde of Bowdoin was spending the summer. We'd go down and have Sunday dinner with the Hydes, which was quite a thrill.

There's a very interesting story there. His son, George Hyde, was going to Harvard Law School, and he would come back every Sunday with some new Harvard stories to tell the old man. He'd wind up by saying, "Did you talk like that, Dad, when you went to Harvard?" The stories were quite cute. One night he told us about the two Harvard chaps standing in front of Pierce & Leavitts Tobacco Shop on Cambridge Square, and one of them said, "I'm in a beastly predicament, you know. I have to schedule my classes for next semester, and I don't know what to take." The other fellow said, "Why don't you take basketry and pottery? They're very interesting and not too beastly hard, you know." And then he said, "Dad, did you talk like that?" The old man was smiling.

- ERM: What did the old man say in response to the question?
- GLD: He would just laugh and smile. What could you say? Then he told another story I remember. There was a track meet at Harvard. The broad jumper from Princeton name d Cunningham, who had been quite a football player, had beautiful cauliflower ears. Two Harvard chaps were standing on the sidelines watching. One said, "Who's that fellow over there?" "That's Cunningham, the Princeton broad jumper." "Oh, yes," he said, "quite a jolly athlete, you know, but not much of a chap socially."

That was a very interesting summer. We probably made lots of errors, but nobody ever knew it. We surveyed the Mount Monadnock forest reservation—about six hundred acres on Mount Monadnock. And then another one—I think sixty acres of pine forest, Jeffrey State Forest. We were quite the local heroes at the town dances on Saturday nights because we were rugged boys living out in the jungles all of half a mile from town. I was dancing with a woman one night and she said, "Tell me about your experiences." So I put on a big cock-and-bull story about being out in the wilds of Oregon the summer before. Then she said, "Isn't that interesting?" I told her I had built most of the trails in Jeffrey State Forest. What they would do was go along and pile three stones on top of each other, and that indicated where the trail was. So Eaton and I spent our time the next day moving all these stones over into the densest brush we could find.

ERM: And you worked there for one summer?

GLD: I worked there one summer. The last part of the summer, I had a very interesting assignment. The New England towns and cities enclose a lot more land than just the urban areas. The city of Concord had, I think, forty-nine square miles of territory, and they had some severe problems of fires originating out in the brush. They sent city equipment out there, the old horse-driven equipment. They'd get on a blind road and then they'd get trapped. I was sent out to make a fire type map of the hazardous areas. I traversed every private road to see whether it was a dead end. We got a big map of the city of Concord and put it on a piece of cardboard. We'd chain along the road, and then I'd sketch in the timber.

That aroused the curiosity of the native Yankee. He couldn't figure what the hell we were doing. So after we saw his interest in it, we tried to help him out. We'd go past a farmhouse, and they'd all rush out on the porch, and we'd say, "This is going to be pretty good property when they get the next electric road through here." So the rumor went around that there was going to be an electric railroad. One time we had to start from a crossroad, and we'd been there before. Each day we'd go in a different direction, and this fellow kept getting more and more excited seeing us there. I told the boy with me (he was ahead of me with the chain), "When I tell you to go, you go like hell." We were all ready to start measuring on the fourth day. I walked over to the fence and leaned over into this fellow's yard and said, "We'll have to put the telephone pole right there" (right in front of his door). Well, he let out a yell, and I took off down the road and kept ahead of him.

ERM: You must have had a reputation as a practical joker in those days.

GLD: No, I think it was just being among the Yankees, that's all.

ERM: Did you have any personal contacts with Ed Hirst?

GLD: I worked very closely with him in the office, yes.

ERM: Do you recall any stories about Ed?

GLD: No, he was a very serious-minded state official.

ERM: Nothing that would help us see what kind of a man he was in those days?

GLD: Well, I didn't know Ed as well as I've known him since then. He has visited me out on the Coast. He's quite an avid fisherman. He spent some time in his early days in northern California, so he always enjoyed going out to the Coast. And I've met him at his home—I think the most interesting experience I ever had with Ed, I made a call in the middle of the winter at Concord. He said, "You're here at the right time. Tonight we're having a meeting of the Snowshoe Club. Lawrence Wittamore is going to be here." He was the big man in New Hampshire forestry. He was with the Brown Company and very prominent as a trustee of the state university. They have

a school of business administration named after him now. This Snowshoe Club dated back to early days when snowshoeing was a very vigorous, manly sport. They built a shack on a hill about a mile or two out of Concord, and they would hike up there on snowshoes and cook a meal. It had become quite a select membership. They didn't go up in snowshoes anymore, but in Packards and Cadillacs. They'd go up there once a month and cook their own meal, then indulge in clever conversation around the table, and wind up with a big poker session. I enjoyed that meeting. I never heard so much keen wit.

ERM: You started to tell me a story about your first summer job with the Forest Service in 1910 in the West and how you came out to Eugene and found you had to go to McKenzie Bridge fifty miles away.

GLD: Yes. That was my first year at Penn State. I went there as a sophomore. The school got us jobs with the Forest Service. Frank Craighead and I were supposed to go to Eugene, Oregon to work on a cruising party. He became an expert in forest entomology.

ERM: He was just a sophomore too at the time?

GLD: Yes. Neither of us had ever been on a Pullman car before. We got on a Pullman at Pittsburgh to go to Chicago. A young lady had a lower berth, and she didn't know how to retire and we didn't know how to retire, so we sat up until about three o'clock in the morning wondering who in hell went to bed first.

ERM: How did you solve it?

GLD: Finally a porter came around and said, "Don't you want me to make up your beds?" We didn't know that the porter made them up. We didn't have much money, so we thought we'd take a lunch from Chicago, and we bought some ham sandwiches. It was terribly dry. There was no air conditioning on the train, and going across the prairies the second day, you couldn't bite through the damn things, they were that hard. Well, we survived to Portland, and then went down to Eugene. When we got there, we reported to the supervisor, Clyde Seitz. He was a very brusk individual. He told us he'd never heard of us. I said, "Can't you check with the regional office?" He said, "I'll call Portland. You come back tomorrow." So we went back to the hotel. We didn't have much money. The next day we went back and he said, "No, there's some mistake. You're not supposed to be here."

ERM: All of this time you were traveling on your own money?

GLD: Oh, yes.

ERM: The Forest Service did not pay your way out?

GLD: No. They paid \$50 a month and board when we began work.

ERM: And you had to get to the job?

GLD: Yes. "Well,"I said, "We've got to do something. Aren't there any other jobs?" And he said, "There's a job at McKenzie Bridge building trail. It's \$1.50 a day and board." I said, "We'll take it." So we went back to the hotel and found out McKenzie Bridge was fifty or sixty miles away. We made arrangements the next morning to send our baggage up on the stage, went down and put \$10 in the bank out of our \$20 we had left, and started hiking. The last mile we were barefooted, our feet were blistered so badly. When we got to this place, Vida, we stayed at a farmhouse, and we found that all the men in town were gone. They'd gone to Reno to see the Jefferies-Johnson fight. The next morning, the first mile we broke our blisters and finally went through a little town called Blue River. We saw handmade signs posted for a July 4th celebration

the next day, including foot races and prizes and a balloon ascension. When we got to McKenzie Bridge that night, I told one of the men who was a football man from Michigan State about the Blue River celebration. He said, "Let's go back tomorrow and get some easy money in the foot race." We got a couple of old pack horses, but couldn't get them out of a walk. We finally got to Blue River and the foot races were over. The prize was fifty cents, so we didn't loose much. But we did see the balloon ascension. The cockeyed part was that 1910 was one of the critical fire years in that country. Blue River is right on the banks of the McKenzie in the heart of dry timber, and the balloon ascension consisted of putting up two paper balloons about six feet tall and about three feet wide, I'd say.

ERM: And how did they make them go up?

GLD: They had a wick in the bottom. It was excelsior dipped in resin. You couldn't have invented a better incendiary fire balloon because eventually they'd get afire, and then they drop to the ground with all this burning material. The Japanese didn't do as good a job as that when they tried it. What always thrilled me was the man that held the balloon while it was being inflated was a forest ranger in full uniform. This illustrates how far we have gone in fire protection.

ERM: What happened in this particular case? Did these balloons set fires?

GLD: No. The good Lord was with us that day, I guess. It just shows how naive the Forest Service was at that time. They just didn't appreciate the risk.

Then we hiked into the south fork of the McKenzie and started work. That's when our pay began. We started building trail. Word came through in about a month that there was a job opening up on the cruising crew but Seitz didn't recommend our going there. The season was getting late but I wanted the experience in cruising. Craighead and I flipped a coin to see who'd get the job. I won and started out the next morning for Oakridge. This was 1910, and the district ranger didn't even have a map of his own district.

ERM: Who was that? Do you remember his name?

GLD: Smith Taylor. A very fine man. He couldn't tell me how to get over there—just pointed and said, "I think this trail will take you over there."

ERM: He had no map at all?

GLD: No map at all of his district. I damn near got drowned; I fell off a foot log into the roaring river. That night I built a fire right in the middle of the trail and slept right by it in fear of cougars. The next morning I started out, and there were two trails and a forest, but no signs on them. I took what I felt was the most traveled trail and wound up in a big mountain pasture on Lookout Mountain. They had a lot of cattle up there for the summer. They thought I had salt, so when they saw me, they came roaring down at me with their tails up in the air. I lit out for the brush and went over the side of the mountain, luckily went on the right side, and finally wound up and hit the right trail.

ERM: That was sure luck.

GLD: Just luck. The woods were full of smoke. There were forest fires at that time, and as I went along, I kept looking to where I could duck under a log on a creek in case of fire. I finally came out at the settlement. I walked 150 miles to jobs that summer.

ERM: And this was generally true of the conditions out there at that time?

GLD: Yes. The lack of basic information like good maps.

ERM: Now, where was this precisely?

GLD: This was on the Willamette [formerly (in 1910) Cascade]. I came out at what is now Oakridge, where Pope and Talbot have their big mill.

ERM: What did you actually do out there?

GLD: When I got over there I went on a cruising crew. The interesting thing was how little thinking ahead there was. This was one of the first cruising jobs the Forest Service had ever performed, and it was one of the last pieces of timber that was ever sold. They were building an extension of the Southern Pacific known as the Natron Cutoff. Supposedly somebody had applied for this timber thinking it was going to be near the railroad, but the country was so damned rugged that it was never sold until way back in the early forties.

ERM: Timber cruising was done by the Forest Service with its own personnel. Who did you work with on that cruise?

GLD: I worked under a man named Alfred Hastings, who later became state forester in Vermont. And how impractical we were, because we didn't pace as cruisers normally do. We used a thirty-three-foot chain. You can imagine how slow that was. The chain wore out, and we finally wound up using pieces of bed rope to measure with. But when you have to pick up a little stick every thirty-three feet in the brush, you can imagine how fast we moved. We used the bed rope to pull our packs up the cliffs. We did another silly thing. Instead of making a side camp, we worked with our packs on our backs, and whenever night came, we camped and built a fire—again, the lack of worry about fire. The worst thing you could do was build fires all over the country, but none got out of control.

ERM: How many men were in the crew?

GLD: About fifteen.

ERM: This was a first effort?

GLD: The first big project the Forest Service had ever had.

ERM: How did you get going in the field? How were the assignments made?

GLD: The chief of party, Hastings, would tell what sections we were going to cruise, and we'd start out and try to find them.

ERM: What guides did you have to know where you were?

GLD: We had a transit survey party running the base lines out—the section lines.

I later became Hastings's chief of party on another job. A very funny instance—Hastings was a very pompous fellow, a graduate of Clark University. He had gone to a little prep school in Massachusetts (I think it was called Rockridge Academy), and he had a sweater with a great big R on it. One day in the fall we were standing around the fire in the morning (rain to beat the band; no tents) trying to warm up before we went to work. There was a fellow there from Minnesota named Jack Orr. He was kind of the butt of all jokes because he was very nearsighted.

ERM: A Minnesota man. Was he from the University of Minnesota?

GLD: Yes. He had a brother in the Forest Service, George Orr. We were standing around the campfire. It was cold and there was rain and heavy fog. Hastings came up from his tent, stood there, and

said, "What's the trouble there? Are you cold?" Orr answered yes, and Hastings said, "Well, go down to my tent and get my sweater." Orr said thank you and went down to get Hastings's sweater. When he got down there and started to put the sweater on, Hastings called in a very pompous voice, "Be sure and put the letter on the back," like the captain of the Yale team giving his sweater to a man to go across the Yale Bowl.

ERM: Can you tell any other stories in connection with that cruise?

GLD: Well, we finally caught a stage at Lowell for Eugene—that was the end of the summer. We stayed overnight at a farmhouse that provided meals. There were a couple of cowpunchers eating there too and they don't have a decent day unless. they have gravy on their spuds in the morning so there was a big bowl of bacon gravy on the table, and Orr with his nearsightedness thought it was mush and started pouring condensed milk into it to eat it. We were kids—we thought that was wonderful and we kept our mouths shut, but these cowpunchers—it just ruined their whole day; they didn't have their gravy that morning.

ERM: How long were you out on that party?

GLD: About three months.

ERM: How did you live? We don't have a lot of detail about life on a cruising party like that

GLD: We didn't have any sleeping bags or mattresses or anything. We just had our blankets, what we rustled ourselves. We used to get our groceries and supplies once a week. They'd come in from a little town nearby.

ERM: Packed in on horses?

GLD: Yes. And most of the beef we got was from the old cows that Booth Kelly Lumber Company had condemned—tougher than hell. One Saturday a fellow went through camp who had killed a young cub bear, and we gave our cook the roast off this bear. The next Sunday, instead of eating this damn cow beef, we had this roast bear, and it tasted like pork. Hastings, much to our joy, ate about three helpings of it, and when he got through, said, "Walt, where did you get hold of that wonderful pork?" The cook said, "That isn't pork, that's bear meat." Hastings threw up right at the table, and we kids got an awful bang because we detested him anyway.

ERM: His stomach was insulted the minute the word got to him.

GLD: Yes. How much you learn. I thought all government checks were good as gold. When we were getting ready to go back East, we ran out of cash in Portland. I had to go down to the store to buy some food to eat on the train going back and they wouldn't cash this check. I didn't know enough to go and look up the Forest Service and get somebody there to identify me. We sat there at the railroad station with \$10. We spent \$7. 50 to buy a tourist berth as far as Pocatello, wondering how we were going to eat from there on. We had \$200 or \$300 in checks but nothing else. A boy from our crew who lived in Portland had come down to see us off, and he went up and cashed a check. That solved the problem. We got back East on that. For that whole summer I was only out \$20—cheap experience which stood me in very good stead.

ERM: What are some of the things you feel you learned besides a lot about human nature? You certainly learned an awful lot about timber cruising in that country, didn't you?

GLD: Yes, that was good experience. When I took a civil service examination, those were the experiences that I drew on to answer the questions, more than what I learned in books. I think it was very, very helpful. I think any boy who goes into any branch of engineering should try to get experience during the summer in the line of work that he's going into. It isn't the money, it's the

job, what you can learn. Today people don't want to do anything that's dirty, and trail work was dirty work. But I loved every job there was to do there. I told the boss I wanted to learn everything. I learned how to fell timber and use powder and all those things.

ERM: What are some of the tricks that you learned in using the powder?

GLD: Well, I learned first that there was a correct way to do any job no matter how trivial. We wasted a lot of powder trying to shoot stumps because we didn't know the techniques. After I got back to school and got hold of some bulletins from the DuPont people on blasting stumps, I even sent them out to the ranger to help him with the job he had because he didn't know how to use powder.

I learned most of all to take advice from somebody that had experience. Some of these characters that worked on the trail (they weren't all college boys) had background as farmhands, and you could learn how to use an axe and how to use a mattock and things like that. We were very willing to learn, and we had a wonderful guide in Smith Taylor who was a practical man. He told me afterward that we were the best crew he ever had.

ERM: He was not a college man himself?

GLD: No.

ERM: And all the rest of you on the crew were?

GLD: I think there were two home guards there.

ERM: Home guards meaning people recruited as labor.

GLD: Local people, ranchers, stump ranchers. It was a good mixture.

ERM: What was the day's routine?

GLD: We'd get up and have breakfast and go to work.

ERM: Did you have to pack your tools and everything with you?

GLD: No, they went by pack train. We had a character there I remember well—the most famous packer the Forest Service ever had in the Northwest, Dee Wright. Dee made quite a name for himself, in that they have quite an exclusive mountaineer club in Portland called the Mazamas like the Sierra Club, only they were people who were interested in climbing mountains. Mazama is the name of the old mountain where Crater Lake is. Anyway they had put copper tubes on the top of these various mountains like Mount Adams, Mount Hood, and Mount Pitt, where the records were kept. Then if you climbed and inscribed your name you were eligible to join the Mazamas. The Forest Service decided to put fire lookout cabins up on some of those mountains. As these mountains were only supposed to be accessible by foot, Dee Wright ruined the Mazamas by taking horses up to the top. All the glamor of climbing was lost. There's a lookout on McKenzie Pass called Dee Wright Lookout and a plaque with his name on it.

ERM: Do you remember any incidents in which you saw him operate?

GLD: I told the ranger I wanted to learn how to pack, so I was Dee Wright's assistant. When Dee came into camp, if he had cases of dynamite, he'd always have several hair's-breadth escapes coming in. The horses would roll down the hill with the dynamite or something.

ERM: Were these figments of imagination?

GLD: Oh, yes. He was a good storyteller, and if there were any .people around to listen, he'd just branch out. The night before we left McKenzie Bridge to go to the job, there was a bottle of whiskey in camp, and Dee told us how a southern gentleman offered a friend a drink. The thing was to give the fellow the bottle and then turn your back so as not to embarrass the man by watching how much he drank out of the bottle. I thought it was very good advice. He was a character.

ERM: Why do you say he was the most famous packer in the Forest Service?

GLD: He did more things that other people thought they couldn't do, like climbing to the top of Mount Adams, and other jobs. He was very clever in handling pack horses. We'd had a course in packing at Penn State which was very interesting. They thought we should have some experience, so a man named Daley, the chief packmaster of the United States Army who wrote a manual on packing, came to Penn State College. They thought it would be nice if he'd give the boys a little talk on his experience in the Indian wars. So one night at the forest club he talked, and he hadn't said five words before he started to swear. He was very much embarrassed, and finally old Fergy [John Ferguson] said, "You can't shock these boys." So he talked quite naturally from there on. He'd been around mules all of his life. But I learned more from Dee Wright on how to pack; what not to do and what to do. It was all good background. Then the next summer I worked for Ed Hirst in more technical work.

ERM: What influence did your experience that first summer out here have on you as far as breaking the way for your eventual coming out West?

GLD: We had a chance to state in our application what part of the country we'd like to be in. So I stated the Pacific Northwest. It also helped because they had a record of my work out here. I had made good, apparently. But you weren't coddled then, you were on your own, ft was up to you. Some of the boys, of course, decided they didn't want to be a forester.

ERM: A little too rugged?

GLD: It didn't appeal to them. They weren't fitted for it.

ERM: Well, I can imagine the living conditions weren't always very comfortable.

GLD: They were normal for living in the woods.

ERM: But you didn't seem to be as well equipped at that time as, they would be now.

GLD: Mentally, we were better equipped. We were willing to work and weren't expecting too damn much. Something to eat, that was the main thing.

ERM: What kind of grub did you get?

GLD: We had some pretty good food, pretty good cooks on that job. On another job we had a terrible cook—good cooks are born. He was like the fellow that criticized the cook— "That so and so can't even cook pangorum." And somebody said, "What's pangorum?" and he said, "I don't know, All you have to do is mix it with water."

This other cook, Jack Ryan, was a tough bird. The chief of party was a very fine ex-Bostonian, and this Ryan would just deliberately see how nasty he could talk around the table to see the boss wince. He told one story that I remember. Jack was an Irishman from the navy and had been stationed at the Charleston Navy Yard in Boston. There was a member of the crew there—a seaman who apparently had a little money who died and didn't want his relatives to get it; so he gave it for the purpose of having a very formal funeral. They had enough money, so they

chartered street cars and went out to Forest Hills, a famous cemetery in Boston, where all the poets are buried. They had street cars loaded with cases of beer, and they drank beer all the way through Boston and out into the countryside where the cemetery was, and they had a most wonderful funeral.

ERM: It sounds like a great wake.

GLD: It was a wake. To get Jack to tell it was a treat as his language was very expressive.

ERM: Were you out on the cruise continuously all summer for three months or did you get time off?

GLD: Sundays we washed.

ERM: You got back into town occasionally.

GLD: There was no town to come into.

ERM: You were really out in the bush all the time? No weekend Fourth of July dances to spin the local damsels?

GLD: The first time I got into labor problems was that summer. When Labor Day came around, we had worked Sundays for months, so we decided we were going to take Labor Day off. The boss said if we did, our pay would be canceled, and we said to hell with you and didn't work that day. We went swimming. I was the leader of the anti-work group, but he never reported me for insurrection.

ERM: You're a damned radical.

GLD: Well, I probably was that day. I needed a bath anyway. The interesting thing was how primitive things were. All we had for first aid kits were some old army tin boxes that were sealed. They had come down from the Spanish-American war and were a compress for a gunshot wound. I had a boil on my chin which could have been very critical—the whole side of my face swelled. I was just full of pus, and do you think I could get anybody, the chief of the party, to dress it? No. My mother was a nurse, and I knew something about a poultice so I made some home-made poultices out of condensed milk and crackers and used the bandage to hold it on my face to draw this pus out. But nobody in the party knew anything about it. Nowadays you wouldn't think of going out without a medical kit.

ERM: What did you do when people got sick out there?

GLD: Laid in your bunk that day and the next day you went to work.

ERM: What if you weren't able to go to work?

GLD: Nobody got hurt seriously.

ERM: Never got that sick?

GLD: No, we were a healthy bunch.

ERM: Well, that was good experience for you, and it gave you a taste of living in the West that made you come back to the West after you got out of school. Who were the people at Penn State you remember most vividly?

GLD: Ferguson made the biggest impression. He was a very wonderful person. He wasn't a dynamic teacher from the standpoint of the technical knowledge that he had.

ERM: John Arden Ferguson, professor of forestry, and he was head of the school, wasn't he?

GLD: He had been a teacher in some small prep school before he went to Yale, so he had something that most early Yale graduates didn't have—a knowledge of how to teach people. He would give us a textbook and say, "I don't know a damn thing about the subject, but Henry Graves, who wrote the book, knows something about it, and you're going to learn, period." He was a dynamic cuss. He was a great deal like Peavy, who was out at Oregon State afterwards. He had a wonderful influence on us. We thought the world of him. He would give us these pep lectures. He'd say, "When you get out West, away from home and mother, you've got to have guts." And another expression he had was one they use down South for shooting timber down off the hills. They call it ballhouting. It's sliding logs down on the ground. So we developed a class yell out of it. We had guite an interesting class at Penn State in 1912. We were very much of a gang. We roamed the campus as a group—we were the roughnecks of the campus. We took the honors away from the miners who before had been the hard guys. So we got a class yell: "Ferguson/Ferguson/nuts/nuts/nuts// Fergus on/Ferguson/we got the guts." And we'd go down in a group under his windows—he had an office upstairs—and he'd hear that and old Fergy would smile and he'd say, "My boys."

Hugh Baker was there for about a year, then he went up to Syracuse and started the forestry school. He didn't give us very much practical teaching; he was looking toward this job he was going to do the next year.

ERM: Were there any other professors who you remember?

GLD: None. There was another fellow that I got to know afterwards out West—a young fellow from Harvard named R. R. Chaffee. He afterwards worked for the Wheeler people out in California. I got to know him very well when I was in the industry, and I thought a lot of him. He lived in Berkeley. He was a very fine fellow, a very good instructor. We all respected him.

Then there was another fellow named Berry who founded the forestry school in Georgia. New schools were opening then, and they were picking men out to set these schools up. I was taking a course in forest management under Berry. One of the jobs that we had to do was to develop a plan for a certain logging area and make a map and plan of the area. I stayed for Easter vacation—I didn't have enough money to go home. So another fellow and I went out, and we made a very detailed study. We had the best map and the best plan, and we had spent all Easter vacation doing this work. So I went around to Berry and said, "We've spent a lot of time on this map. Couldn't we write up our report together rather than doing it individually? I think we'd get more out of it." "Oh, " he said, "Drake, I expected more of you. Roak is preparing his own plan" (there was a fellow named Jack Roak who was buttering Berry up all the time). I said, "Don't compare me to that son of a bitch, " and when I got my next grades, I just barely passed. I found out you'd better keep your criticism to yourself.

ERM: How profound an impact do you feel that your education at Penn State had on you?

GLD: Oh, I think I got a lot out of it. But the fact that I'd had some practical experience helped more than anything else. You could put two and two together and realize what it was all about.

ERM: Now, you went back to school after the summer of 1910, and in the summer of 1911 you worked with Ed Hirst in New Hampshire?

GLD: Yes. Then I graduated the next spring, 1912.

ERM: In the summer of 1912 you got your regular job in the Forest Service?

GLD: We didn't get our appointment until August because they hadn't passed an agricultural appropriation bill until August.²⁰

ERM: What did you do between the end of school and August?

GLD: I spent all the money I had on my girl and then ran out of money and worked in an ice house moving ice on box cars for the Boston market. That was back in New Hampshire at home, Lake Winnipesaukee. That was a great adventure. Then I had to report at Portland.

ERM: Again did you have to find your own way out?

GLD: Oh, yes, you had to pay your own expenses. Nothing started until you got on the job, and then they paid you.

ERM: From that point on your expenses were paid.

GLD: Yes. The actual salary when I took the examination was \$1200, but they hired the first forty on the civil service list at \$1200, and then the rest of us—I think I was forty-fourth on the list that year—they hired at \$1000. By the time I got a permanent job the next year, they'd cut the salary from \$1200 to \$1100. That was my salary, \$1100.

ERM: How did you make out on that kind of money?

GLD: I didn't have enough money to get married until I got a promotion to \$1400. Then I thought I had the world by the toil.

ERM: How long did it take you to reach that point?

GLD: I got that in the spring of 1914.

ERM: In other words, you'd been on the job for not quite two years.

GLD: Yes. I worked that first summer down on the Crater National Forest, and then money ran out after six months and I was canned, and I went to work the next day out in an orchard, pruning fruit trees.

ERM: You mean your first job with the Forest Service in the summer of 1912 only lasted a little while?

GLD: Less than three months, and then they were going to lay me off. I cried about it, and they gave me another three months' grace and then cut my pay off—they had no money. So I got a job working in an orchard, and then they had a rangers' convention in Medford, Oregon. I went and applied for any work, and they gave me a job working in a cruising crew for \$50 a month, and I took that. I went to work with a bunch of rangers cruising timber up around Crater Lake on snowshoes. I was the technical man and did all the engineering. Then I got a permanent job at \$1100 and was transferred to the Columbia National Forest and worked on another cruising crew as second in charge under Hastings whom I had worked for in 1910. I stayed on that two months, and then a job came up on the Okanogan National Forest in Washington and I went up there. That was May 1913, I think. And that was a big job—what they called intensive reconnaissance.

²⁰ Agricultural Appropriations Act of 10 August 1912, 37 Stat. 269, 287.

ERM: What's the difference between that and what you had been doing?

GLD: Intensive reconnaissance involves covering a large area, 500,000 acres in this case, in a sketchy way, getting data on drainage, on all the natural resins, timber and grazing—the first step toward a resource inventory. There were a half-million acres up there that hadn't been mapped or cruised or anything. In fact, they didn't have any accurate map, they just had a rough drainage map. I made the map from which they made the forest map afterwards. I also estimated extra grazing range, which was new to me. We found enough range for 25,000 head of sheep or so. I covered the north half of the Okanogan south of the Canadian line, from the Cascades over to the Okanogan. And that was a wonderful experience. It was a tough job.

ERM: Tough in what respect?

GLD: Rugged. No maps, trails not marked. I had a fellow with me to pack. The two of us—he was supposed to do the grazing end but I found out he didn't know a damn thing about it. I couldn't do anything until I had a map to indicate where the stuff was. So I just had him do the packing, and I did all the dirty work. I wore out seven pairs of shoes that summer and mapped all that country. And the interesting thing was, all I had to map with was the end of an apple box. It was a plane table; I had to carry all my controls from the Canadian boundary sixty or seventy miles down and map all these rivers and mountains and everything. You had to have a map first to show where the timber was. Later on they went in there with a transit survey and checked on it—my map was very accurate. It was a little bit off here and there, but I mean in general, one map fitted over the other. That was a wonderful experience.

ERM: You always had to find your own way back to camp.

GLD: Many is the night I slept out because I never got back to camp. Slept out under a log or something.

ERM: Were you ever really seriously lost?

GLD: Not to admit it.

ERM: But in reality?

GLD: Yes. Anybody who says they were never lost, never went out in the first place.

ERM: What did you do in a situation like this?

GLD: Didn't get panicky. That's the first rule. Get some sleep. In the morning things would clear up.

ERM: Did you ever lose any members of your party?

GLD: No, I never lost a man. There wasn't anybody there except this other guy, and he was always safe because he stayed on the trail.

ERM: But you'd do the hard work.

GLD: I did all the work, yes, all the mapping. We started our control from the boundary line that had been surveyed. You would take a sight from a known point on a peak in the survey area. Eventually you'd wind up on that peak. Then you'd shoot back and locate yourself by the peak and get a cross intersection. Then you'd shoot peaks ahead. That way you'd sketch the ridges, and then you'd locate the streams in between. That's very rugged country. That's where some of this wilderness area they're talking about is.

ERM: You mean the North Cascades?

GLD: Yes, that was a wonderful summer's experience.

ERM: Is that country particularly well suited for that kind of use?

GLD: Oh, parts of it are. Other parts should be left for future development. There's some mining and some timber and grazing.

ERM: Where else did you work in those early days, George? And what kinds of work did you do?

GLD: I came back to Okanogan in November and finished up my summer's work. In the spring of 1914 a job came up in Alaska for forest examiner.

ERM: What did that involve?

GLD: Well, a little of everything when I got up there. I found out the supervisor Bill Weigle did not favor smoking, so in my application I mentioned I didn't smoke. I'd met my wife then, and she didn't like smoking either. I'd thrown a good cigar away one night. I also mentioned that I'd had experience in boats as a kid on Winnipesaukee, which was helpful because everything's by boat up there. So when I went up to Alaska, it stood me in good stead; and I liked the work. That was a tremendously interesting job.

ERM: You had met the future Mrs. Drake, however, some time before going up to Alaska.

GLD: She was an Okanogan school teacher. You hear a lot about having incentive in order to do your best. I liked to dance in those days, so I went to a Fourth of July dance in Okanogan before I went on the main job right after the Fourth and had a good time. Some of the local girls said, "You want to be sure and get back for the big Halloween dance." I said, "I'll be here." I scheduled my work so I was in Okanogan Halloween night. I worked Saturdays and Sundays, but I planned my work so the snow was chasing me down all the time—early snow. The other fellow that had the job on the south Okanogan didn't get through, and he had to go back the next spring and finish his job. But I finished mine so I could take this job in Alaska. That was the incentive—I worked hard that summer so I could get back to Okanogan for Halloween night. Dora was there at that dance.

ERM: Where did she come from?

GLD: Her folks were living over on Whidbey Island, Puget Sound, across from Everett. It was her first year at teaching. Her name was Dora Polly.

ERM: And what was the background of her family?

GLD: Her father was a lumberjack up in Minnesota. A contractor.

ERM: Was he doing the same sort of thing then?

GLD: No. They went out West and they were ranching, I guess you'd call it, stump -ranching. She had exhausted all the eligible young men around Okanogan before I got back from the brush, and she'd asked her landlady (I used to kid her about it) if there were any more eligible young men around here. Her landlady said, "There's a couple of rangers up in the hills. They'll probably be driven out when the snow gets deep up there." I had no chance when I got down.

ERM: She was there waiting for you.

GLD: I hadn't seen a woman for six months. We had a wonderful time at those parties. That was a nice little town. It had boomed as apple country, and then the railroad never had come. There were a lot of young people, but they didn't have much money and they made their own entertainment. It was a nice little town to live in.

ERM: How long a courtship did you and Dora have?

GLD: Well, I left in April for Alaska.

ERM: And you met her in October?

GLD: That was 1913, and we were married in September 1915. I went to Alaska and spent four years there.

ERM: But you were in touch with her all the time by mail?

GLD: Yes. I went back to Okanogan the next Christmas.

ERM: You came back from Alaska?

GLD: Yes.

ERM: You didn't get back home to your own stamping grounds in New England very often in those days.

GLD: I didn't until after we were married. We went back on our honeymoon. The winter of 1915-1916. I thought I had all the money in the world. I'd given her some money to buy some silverware and things like that. I had \$600 left. I thought that would take you all over the known world, and when I got back home, I ran out of money. I had a round-trip ticket, but I didn't dare ask my father for any money because I knew what he'd have said—"If you don't have enough brains to know what you're going to spend, you'd better not ask me, " s o I went to a good friend of ours and borrowed the money from him, so my father wouldn't know what a spendthrift I was.

ERM: No sin is greater than that in the eyes of a Yankee.

GLD: Well, like Cal Coolidge said about the British war debt, "They borrowed it, didn't they?" The experience in Alaska was very wonderful.

ERM: What did you actually do up there?

GLD: I went up there as forest examiner—the technical man on the forest. Pretty soon I found out I was doing everything the rangers were, plus all the technical work, and they were getting \$1600 while I was getting \$1400. They were supposed to give you twenty-five percent more pay up there, but that didn't cover your extra costs of living there, especially if you were a married man and wanted to get out once in a while. As long as I was living on government expense, I saved some money. They created the job of deputy, and I became the deputy supervisor at \$1800. That was the highest paid deputy in the United States. We got about \$200 more than they paid in the States.

ERM: Who were some of the men you were associated with in that work?

GLD: I worked under Bill Weigle. I took Bruce Hoffman's place. Oh, I worked with a lot of people up there. Then I asked for a transfer down to the States. I was getting too many colds; I wanted to get out of there to where the climate was drier. It was a pretty rugged life. Frank Heintzleman

came up to take my place. I followed Bruce Hoffman. Bruce had been there, and he moved down to Portland. I did all the technical work there. Did a lot of engineering and laid out towns.

ERM: What towns did you lay out, George?

GLD: Oh, I laid out Warm Springs, Kake and Hoonah.

ERM: You actually laid out the street system and the lots and all the rest of it?

GLD: All the rest of it. I was the only one who could use a transit.

ERM: What did that have to do with the Forest Service?

GLD: These towns were on national forest land. They were going to eliminate them from the forest.

And then I started all the original water resource surveys up there, put in the stream gauges and things like that.

ERM: Was this your own idea or something you were ordered to do?

GLD: I wasn't ordered. A fellow came up from the Geological Survey to do it, but when I went out with him, I found out he didn't have any practical concept of how to do things. It ended up I was actually doing the planning of how to put in gauging stations.

ERM: And how did you actually put them in?

GLD: He stopped in Portland and had some company make a lot of big wooden staves for wells.

ERM: Did they measure flow?

GLD: Yes. You find a location where you think it won't be disturbed by obstacles so the water level will be stable and then you put the gauge in and you have a machine that records the levels every day. You measure the stream with a meter. After that, you just record the levels—it tells you what the flow is every day that goes past. It's very important to know that before you plan on developing water power. The tank or box was in the stream or by the bank with a pipe leading to the stream.

We had one experience that was a knockout. There was a lake we wanted to survey for water power, and we made a very detailed survey of the lake and took soundings of it. When we got through, we wanted to measure the amount of water flowing out of it. The outlet of the lake ran about 300 feet and then went down over a cliff 300 feet.

When we got everything done, the last job we were going to do was to measure the stream. I got a boat, and had the boys take a heavy piece of telephone wire and string it across the mouth so we could hold the boat on that. Then we got in the boat, I was at the oars and this fellow from Geological Survey was in the back with the instruments and a Swede was in front. The boat was overloaded. I rowed up to this wire and he was to throw the rope over and hold it. Then we'd edge along this rope—you measured every seven feet to make a profile of the stream. He missed the damn wire and the boat tipped over and filled full of water. Here I was at the oars, and the oars had gone out of the oar locks. We were drifting down to this brink, and these other two guys paralyzed watching me. When I found I could not get my oars in I jumped overboard. Without any hesitation they jumped with me, luckily, and we lit on some gravel so we could get some footing before the current got too strong. We went over on the bank and sat there, and took a lot of deep breaths and then went over and looked down over the 300 foot drop, and there was the boat. We grabbed the. boat and took it to the bank, then went and carefully held it up against the bank until we got to the wire, threw the rope around and went out and finished

the job. But it was a matter of, probably five seconds and we'd all have gone over the brink. But these other fellows were very slow thinkers. Oh, there were a lot of exciting experiences up there.

ERM: What others from Alaska are vivid in your memory?

GLD: I've been in some bad storms on the water up there, snow storms and hail, bad winds. You navigate a boat up there for four years and you get all kinds of weather. I was the first of the technical men to run the boat themselves. I liked to boat and so I didn't want to hire a man, I'd rather run it myself.

ERM: Your work then was up and down the coast.

GLD: Twenty-five hundred miles of shoreline—you couldn't do anything otherwise.

ERM: Then you didn't venture very far into the interior.

GLD: We didn't have much work in the interior to do. I've been up some of the rivers, but not very far.

ERM: So your means of transportation was by boat.

GLD: One hundred percent.

ERM: What kind of a boat did you operate?

GLD: We had four boats when I was up there. We had the *Tahn*, which was the big boat. It was a sixty-five-footer. There were three on her, a captain, an engineer, and a cook. Then we had the ranger boats—there were three new ranger boats that had been built in Bremerton Navy Yard in 1911. The one I had—the *Ranger-4*—we used as a work boat. We had a man to run it at first; later I ran it alone.

ERM: What kind of boat was this?

GLD: Well, the *Ranger 1, 2* and *3* were very well constructed boats. *Ranger 4* was a boat that had been built in Ketchikan by some house carpenters from a knock-down plan you could buy out of Detroit. She'd been all right on the Detroit River, but she wasn't built for the heavy abuse of Alaska. She wasn't strong enough. Had a hell of a good motor in it. I have been out when the big liners tied up. I didn't have enough brains to stay in. As long as you had the sea behind you, she'd float just like a duck, but in a head wind she'd just take water right over. Knock herself to pieces; shake the lids right off the stove. She had an engine that weighed 3100 pounds without the fly wheel. Oh, we had some pretty narrow escapes but I guess the good Lord was with us.

ERM: The work you did in Alaska from 1914 to 1918 was work of all kinds—surveying, laying out towns.

GLD: Timber sales.

ERM: To whom were you selling timber?

GLD: Mostly to suppliers of sawmills that were making cannery stock like packing boxes.

ERM: In other words they were small outfits.

GLD: Yes, fairly small. And then we sold a lot of piling. That was a time of great activity. The war was on, and they were building a lot of canneries up there because of the heavy demand for canned

salmon. So we got to survey a lot of cannery sites and then sold a lot of piling. They used piling for their fish traps. That was a very busy year. We had a very small crew to work with. Most of 1916 I spent up in Anchorage country where they were building a railroad.

ERM: Did you do some of the survey work there?

GLD: No. They were selling tie timber up there to the railroad commission who weren't paying any stumpage for it and hated the guts of the Forest Service because it was a damned nuisance interfering with them. I was up there to see that they were careful with fire and utilization.

ERM: They were able to take out the timber they needed for ties at no expense because of defense needs?

GLD: No. The government built that railroad. It had been started years before and had gone as far as Turnagain Arm and then they rehabilitated it and built it in as far as Anchorage and then eventually up to Fairbanks. It was an Interior Department layout.

ERM: Alaska was very thinly settled at that time, wasn't it?

GLD: Anchorage had just been started.

ERM: Who were some of the men you were associated with up there who later went on to more important roles in the Forest Service?

GLD: Well, Frank Heintzleman was one. He came up in my place and stayed there.

ERM: Who were the men who were there while you were there?

GLD: Bill Weigle was there. He was a fine man, much older than the rest of us, and a bachelor. He died two or three years ago in Pasadena. Weigle was quite a character. I learned a lot from him.

ERM: What did you learn from him?

GLD: How to get along with people.

ERM: You didn't know how to up until that time?

GLD: Well, I was learning. Bill was an interesting character. He had gone to normal school in Pennsylvania and had taught. He taught in a reform school and then went to Yale and took forestry. He was one of the early Yale graduates. He was supervisor of Coeur d'Alene during the terrible fires of 1910 at Wallace, Idaho. He had no background in engineering and was a very stubborn Dutchman—I learned a lot about how to get along. I didn't push things. If I wanted to do things a certain way, I'd talk to him' and if he'd rebuff it, I'd just clam up and wouldn't say any more. Then I'd just go ahead and do it as I thought it should be done, and the could see the results. If they were okay, he never said anything. But if you asked him, he'd have to tell you just how to do it. Afterwards he came down to Seattle and was supervisor. Then he retired and went to work for the state of Washington in charge of their parks.

ERM: Was he a bachelor all his life?

GLD: No, he got married toward the last.

Getting back to this lake (the time I was telling you about going over the falls), I thought it ought to have an appropriate name. I had a Chinook dictionary, you know the Chinook .language, and I found there was a word "shelocum," which means crystal clear. So I named this lake "Shelocum."

On the way up there you cross a little side stream that goes through a box canyon that was known as Maud Creek, after a waitress, a young girl from Seattle who got a job in Ketchikan. She was very good-looking, and old Bill had a crush on her but she finally married a banker twice her age. They went up to this lake on their honeymoon to some hot springs. We discovered three more lakes at the head of the lake that fed into the main take. We had to go over to a logging camp to get coal oil tins to measure the springs.

ERM: You mean there was no knowledge of them?

GLD: No maps. So we went over to Orchard Bay where the logging camp was. There were three girls there, and we hadn't seen anybody for weeks. We knew these girls pretty well; they were nice kids. They had an old phonograph record, and they taught us how to dance "the hesitation"that night. But they knew these lakes were up there, and the fee for teaching us to dance was that we named these lakes after them. So we named one Lake Rowena, Lake Bess, and Lake Neilei. These names were placed on the map tracing I made. Weigle always had to write his name on every map. So I got the map all finished and I said, "Mr. Weigle, would you like to come in and look at my map?" He came in, pursed his lips and without any criticism of the job he said, "I don't like that. You've got to have it changed." I said, "What do you mean?""Well," he said, "these girls names up here. The regional office is against that." "Well," I said, "we thought that was very appropriate. Maud Creek was named after the first white woman who was ever up there and these other girls are the nearest white women that live in the area." Maud Creek was all right; that was his old sweety, so that was okay. "But, " he said, "you've got to change it." "Well, "I said, "I worked about three weeks on this map, and I don't want to erase these names; I'd have to redo the whole job." Of course, I could take a razor blade and scrape it off in five minutes, but I wouldn't do it. "Well," he said, "it's got to be changed." But he signed his name to it before he sensed this. Well, the upshot was it was never changed. It's on the charts today. You'll see the names.

ERM: And that's how lakes and places come by their names.

GLD: A man I worked with down in Oregon once had a mania for naming lakes after women. It's like naming a Cunard liner, you know. But ours were very appropriate because they were pioneers up there.

ERM: Do you suppose those old maps are still tucked away in the Forest Service files?

GLD: I was up in Juneau several years ago to do some work for Alaska Pulp. I was in the regional office, and I asked them, and by gosh, they dug out some of my maps.

ERM: Some of your old maps?

GLD: They made a blueprint of them for me.

ERM: That must have been a satisfaction to find the original old maps. That's the kind of thing that gets me all stirred up. I really enjoy that.

GLD: Well, they've never remapped it. It's a good accurate map.

ERM: You had to be quite a map maker then.

GLD: Oh, yes.

ERM: Another thing that stood you in good stead for later on.

GLD: Understanding what the problems are, that's the main thing.

ERM: Did you ever have any experience with the natives up there?

GLD: Oh, plenty.

ERM: Tell me a few of them—about the Indians and the Eskimos.

GLD: Not Eskimos.

ERM: You didn't get that far north?

GLD: No. The Thliket tribe from British Columbia are very interesting natives. They came across the Aleutians, apparently. They have some of the characteristics of the Japanese. They are very good craftsmen with carpenter tools, like in boat building. But they don't have any word in their dictionary for maintenance. They never finish a job, if they don't get it finished the first time. They'll never go back and finish a job. They build a house and if it starts to leak, they'll just move into the next room until that leaks. Finally after moving into the last room, they'll build another house. But we had a lot to do with them, so we had to learn to get along with them. They were very interesting.

I was out with a fellow one time. He was logging some spruce logs and cutting hemlock to skin these spruce over. We never made much of a fuss because they were low-grade hemlock, but if they were good at all, we expected him to bring them in because there was a market for them. So I wanted to tell him he'd better bring these in. It started to rain like hell, it was cold and I said, "You'd better come back with us to the boat and have dinner with us." It was quite a treat for him. So we got on the boat and I said, "Mr. Atkins, have you been logging much in this country?" He said, "Mr. Drake, I am known as the 'Logging Kid."'

ERM: The "Logging Kid?"

GLD: Yes. Oh, they're delightful people. Here is one of the best stories, I think. I went to look at a forest homestead that a Swede had applied for. This was during World War I, but before we got into it. I knew why he wanted to get it. He thought there was going to be a mining development, and he wanted to use this land for a townsite. Our program was that if there was any indication of occupancy by the Indians, we wouldn't classify it as homestead, so as to protect the Indians. I found ruins of an old fireplace, and then as I went around the creek, around the boundaries of this land, this Indian came out from across the bank of the creek stripped to his waist. (This was along in October and cold as the devil.) He'd been doing some blacksmithing. I asked him who the owner was. He went on and on in Siwash, and finally I said, "How much do you want for the damn land?"And right out of a clear blue sky he said, "\$300." Well, it seems that his sister, who was known as "Sheep Creek Mary" had sold a very valuable piece of land in Juneau for a mill site for \$300. So \$300 was the value of all land in the world.

I went to see the postmaster up at the old mine and I said, "Tell me the story about the log cabin down there that's in ruins, that old Indian place." "Well," he said, "that's Skookum George's." The story was that his brother lived there, and he had two squaws. He took one of his squaws with him and went up the Berners River on a trapping expedition, and as they came back, the squaw in the canoe pointed to the cabin and said, "I see a white man leave cabin, "because she wanted to get rid of number two. So he went over and got George and they went over and killed the klutch (that's a squaw). They both went down to McNeil's Island [prison]. One of them died down there of TB and this other one, George, was released. Well, he came back and then he and his squaw got in a fight with another Indian and his wife, and immediately they came up to see Neadue, the mine manager. The other Indian was a little ahead of him, and wanted a skookum paper. A skookum paper was anything that looks official. The more sealing wax and the more stamps and ribbon you put on it, the more impressive it is.

ERM: The more skookum it has.

GLD: The more skookum the better. So Neadue gave this fellow one. He'd no sooner gotten out of sight than old George came in and wanted a skookum paper because he was going down to Juneau. So Neadue said, "You sit down, George. I'll have to took it up." As Neadue tells it, "I got the biggest book I had. It was the postal directory of the United States. I searched through it for about half an hour. I had nothing else to do, and I finally sat down at a typewriter and wrote a letter and got all the seals I could and all the ribbons and gave it to him. He left, and when he came back from Juneau, there was nothing he couldn't do for me. But," he said, "I was kind of curious about what had happened down in Juneau, so I ran across the judge down there and I said, 'What happened when George came in here on this complaint about a fight?' The judge said he'd read my paper and told George if he hadn't brought that paper, he'd be back at McNeils Island." I asked Neadue what he had written on the paper. "I had to be truthful," he said. "All I could say was, 'I have known this man, Skookum George, for many years. The only bad thing he ever did was kill a klutch. "' Well, the result was we didn't give the Swede the land. We didn't like the Swede anyway—he was pro-German, so he didn't have much chance.

ERM: So you used that as evidence against selling land.

GLD: Because of the fact that the Indians had priority, we tried to protect them as much as we could.

ERM: Were the Indians ever difficult for you to deal with in any way?

GLD: The Indians hand logged and sold their logs to the Ketchikan Mill. The Ketchikan Mill would buy small rafts of logs from the Indians, which I had to scale, and when I would go down to scale, they would come down and watch. They'd powwow together and accuse

me of being a crook in the pay of the sawmill company. I'd run them off the raft and tell them to get the hell out of there or they wouldn't get their scale.

ERM: You had to be hard-boiled.

GLD: Oh, yes. But they weren't vicious.

ERM: Except with their wives.

GLD: Well, that was legitimate prey if she wasn't faithful. I'm going to tell you a story as Frank Heintzleman told it about the excursion boat that came into a cannery. When the boats come in, the native women bring out moccasins and baskets to sell to tourists. An old squaw was sitting in front of her house with baskets around her and kids playing. One of the little kids had red hair, and one school teacher was very curious. She finally got up her courage and she said, "Is that your child?" and the squaw answered, "Yes." The school teacher said, "Did his father have red hair?" "I do not know; he did not take his hat off."

ERM: Did you come back from Alaska then to marry?

GLD: No. We got married in Juneau in 1915. Had our honeymoon on the *Ranger-4*, a very rugged two months of weather.

ERM: I thought you took your honeymoon in New Hampshire.

GLD: Well, we didn't get to Ketchikan for two months. We were working all the time. Then just before Christmas, we started east.



"Leaving my first big fire, 25,000 acres, at Meadow Creek, Whitman National Forest, 1919. The story behind this picture is: When I left the Portland office, one of the older men who had little use for college men, remarked with a sneer, 'Going to another white collar job.' As I left camp after a month of eighteen-hour days and ninety to one hundred degree weather, Walt Dutton took this picture so I could show the so and so what a white collar job did to a man. I had lost about ten pounds."

ERM: And then you went back and worked two more years up there in Alaska?

GLD: I worked until 1918. That was 1915.

ERM: What made you move from Alaska? Was it your own wish?

GLD: I asked to be relieved. I'd put in a very rugged winter cruising airplane spruce for the war effort. I'd been turned down by the army, but I could go out and do that kind of work okay. I'd had persistent colds, so I asked to get relieved and I went over to pine country in Oregon, the Whitman National Forest over in the Baker area. There were more timber sales there than anywhere else in the country. I had charge of timber sales. I was forest examiner, but I was in charge of the timber sales under the supervisor.

ERM: Under the supervisor in the Whitman?

GLD: Yes. They had three big major sales going on at once.

ERM: To whom were these sales made?

GLD: The Oregon Lumber Company, the W. H. Eccles Lumber Company, and the Baker White Pine Lumber Company. We had to mark all the timber.

ERM: Did that mean every tree that was to be cut?

GLD: Every tree that was cut had to be marked.

ERM: How did you go about your marking in those days?

GLD: We did it with a marking axe. We put a notch in the base and stamped it, and one u p on the bark. We did a very good job of marking. I've been back and looked over that, and I'm very proud of what we did. I had a fellow working with me doing the marking. I did a lot of it myself, but had him to help me out. Then I had several scalers.

ERM: Where was the scaling done?

GLD: Right at the landing before they loaded them on the cars. That was the year that the flu first hit and most of my crew got sick. A couple of them died. I'd go to work about daylight because I was doing extra work. Then I'd come in at night and get their wood and water for them. Nobody would go around their house naturally. But I never got the flu.

ERM: You didn't get it?

GLD: Not that year. I got it next April (1919). The war was over.

ERM: I darn near died in 1918 from the flu. I was just a baby and my mother was all alone in the little town of Bockville, North Dakota. My father was away at a meeting of his Methodist Conference in Bismarck and he got it and also nearly died of it there. My mother and I were sick with it and only survived because the doctor in the community came around once a day and pushed a little food in our mouths. I don't have any recollection of it, but my mother tells the story.

GLD: I helped these families. I'd bring the water in to them. They had to bring well water from outside. You have to go through it to know what was like. I got it the next year. I'd been looking at some timber up the Columbia River and felt fine and went down to get the train back to Portland and on the train, I began to have fever. I ate dinner on the train and, boy, I went to sleep. I got off the train at Portland and got home in a taxi or something. When I got there, my wife was sitting

up. I was burning up, and the next day she came down with it. Then I had to get up and take care of the family.

ERM: It's really hard to imagine things like that today, isn't it?

GLD: They died like flies in those logging camps. I think a lot of them died just of fright.

ERM: Because they saw others dying?

GLD: Yes, they were fearful of it.

ERM: It was like the plague.

GLD: That's what it was, exactly.

ERM: How did you handle the problem of the dead and the dying in a situation like that?

GLD: It was up to the county and somebody else was taking them out.

ERM: For your crews, though?

GLD: I didn't have anybody. I had one of the rangers up there. He and his wife and daughter died of it. We were in Baker then. Oh, that was a good place to be away from. There were no doctors up there in the brush.

ERM: Well, there weren't really an awful lot of doctors who knew how to deal with it anyway.

GLD: They didn't have any medicine, any penicillin or anything like that. You just got well or you didn't, period. You kept warm, that was the main thing. It was quite an experience to be up in a little isolated place like that where there was no medical attention. The nearest doctor was about forty miles and no transportation except the train.

ERM: George, looking back on the days of World War I, how did the war influence the developments in the field of forestry and the Forest Service?

GLD: Of course, there was a shortage of men for one thing. One of the things that always kind of bothered me at the time was the threat to shut down a lot of sawmills because they were nonessential except for packing boxes and things of that kind. The head of the Anaconda properties over in Missoula conceived the idea that if they could make something look like a war necessity, they could keep in business so they advocated using pine lumber to make aircraft instead of spruce. According to all I could read, it was terrible to use because pine shatters with the impact of a bullet, while spruce is soft and the bullet will go through. Besides pine doesn't have the strength spruce has. But we had word to get out all the aircraft pine we could, so we'd scout through the brush and pick a nice tree that we thought was straight-grained and blaze it, and then take a fountain pen and drop some ink and if it went down in a straight line, we knew we had a straight-grained tree. They went to terrific expense and they paid these loggers extra to bring these logs up and never used a damn one because somebody had sense enough to say this is monkey business. I always thought the pine industry got too much credit for its war activities. It wasn't very creditable to stay in business to get material out that wasn't suitable for what it was supposed to be used for.

ERM: Were they milling it?

GLD: They were selling it in flitches, aircraft cants.

ERM: Would they then deliver them to the government?

GLD: Yes. They'd go to factories where they were cut up for airplanes.

ERM: But fortunately they were never used?

GLD: No, because somebody stopped them. I didn't like to do this work. I didn't have any confidence in it. But you couldn't say much.

ERM: Did you ever have any contact or association with the Spruce Production Division?

GLD: No, I wasn't on the coast. But I was a 4L member; that was in the logging camps. Loggers called them the lovers of long-legged ladies or long-lean-lousy-lumberjacks .

ERM: The Loyal Legion of Loggers and Lumbermen. Did you know Colonel Brice P. Disque?

GLD: No, I knew of him.

ERM: You knew Ruegnitz, of course. How well did you know him-personally?

GLD: I knew him when he had his first job working for the Bridal Veil Lumber Company. He was in charge of their commissary, and he wrote quite interesting articles for trade journals. He gave a paper to the Logging Congress on the feeding of loggers.²¹ He went to the 4L movement afterwards. The 4L existed for quite a while, and they did a lot of good. They were a pretty good contact between management and labor. Of course, the unions knifed them to death. The 4Ls were the Uncle Toms of that day. They were accused of being company pets since they were partly financed by the companies.

ERM: George, on page eighteen of your first interview there's reference to the developing interest in safety procedures in the woods. When did these really begin to develop?

GLD: Probably with the coming of workmen's compensation in the lumber industry. As operators found out that this was out-of-pocket money, there was naturally an interest in developing means to avoid these costly accidents. This, I think, was not alone in the forest industry, but in other industries.

ERM: Were there any people in the industry particularly concerned about this matter?

GLD: I think that there were some more interested than others.

ERM: Did any one or several companies, to your recollection, take a lead in developing better safety practices?

GLD: I think most of the credit probably belongs to some of the employer organizations like the Puget Sound Loggers Association. They were directly contacting people in the logging industry; and, as I recall, between about 1910 and 1920 or so, there began to be occasional papers on safety at the industry meetings. I think probably a good clue, if you wanted to pin it down, would be to go through the records of the Logging Congress.

ERM: A lot of the old records of that association are no longer extant.

²¹ See footnote 8, page 11.

GLD: They didn't keep any printed report like they do today. They're pretty complete today.

ERM: Right. You've been active in a lot of different organizations over your career, George, a wide range of logging associations and lumbermen's groups, conservation and forestry groups, fire protection groups, safety groups. When you look back over your involvement in launching these various groups, which of them stick out in your mind as having been the most important?

GLD: The contact through the logging industry, especially through the Logging Congress has been as productive as any. In some of the forestry groups, you were dealing with people all over the country and had to blend your thinking in with what they were doing. But in the Logging Congress you were talking with people whose problems you understood and they understood yours.

ERM: They were your own regional breed, your own kind.

GLD: Of all the groups I've kept in contact with, the logging group has the most appeal. There's a fascination to it. I think you'll find more of the older people coming back to those meetings. It's kind of a fraternity, you might say.

ERM: What would you say about the Pacific Logging Congress and its influence today as compared to what it has been? Is it as great now?

GLD: I think it's still a factor.

ERM: Is it as great a factor?

GLD: Well, the Congress itself, through the different conferences, the different regions, still carries a lot of weight. They take the lead in trying to keep things on a level keel. Take, for instance, the matter of public roads. The Logging Congress through Emmit Aston has had much influence. They've been the voice that government agencies listen to, the people in government agencies who have to decide. At those meetings down-to-earth people are doing the talking. At a lot of the early forestry meetings and conferences there were a lot of screwballs.

ERM: What forestry meetings are you talking about?

GLD: The national forestry conferences where fellows like Raphael Zon and Bob Marshall were sounding off at times.

ERM: How well did you know Robert Marshall?

GLD: I knew him in Portland where he worked. I never worked directly with him, just knew him.

ERM: What sort of fellow was he?

GLD: A very likable youth, very brilliant, very radical. Have you ever read his book on Arctic villages²²?

ERM: No, I can't say that I've ever read anything of his.

GLD: It was a case study like Middletown, USA. He went up to a village in Alaska and spent the winter. It was a very fascinating analysis. He even puts down how many times a certain couple had intercourse, which didn't make any friends in the local village afterwards, I was told. All the

²² Robert C. Marshall, *Arctic Villages* (New York: Harrison Smith and Robert Haas, 1933).

wealth that he inherited, which was left to leftist organizations, was earned out of private business; his father was a brilliant corporation lawyer in New York. The boy was off on the wrong track.

ERM: Tell me about Bush Osborne. How did he get his name?

GLD: God knows. He was a graduate of Yale in one of the early classes. His success in the Forest Service was in the field of fire detection, and he was one of the first to give it much thought. He perfected, first of all, the Osborne fire finder which is the standard fire finder used in all lookouts. Then in 1921 he and Julius Hofmann, who worked for the Wind River Experiment Station, developed the theory of relative humidity which revolutionized the thinking about fire behavior and the control of fire.²³

ERM: You knew both of these men quite well, of course.

GLD: Oh, yes. I worked with Bush on a cruising crew in 1913. Fire control was his one love and his one interest; except for making martinis. He used to pack around a sack with all the proper equipment. He came to our house one night and set the thing down and started to unpack, and my wife couldn't figure what it was all about.

ERM: He didn't take any chances on any home grown martinis anywhere he went?

GLD: No. His own wife was very religious and frowned on those things.

ERM: He didn't make them at home then?

GLD: No.

ERM: It's amazing how many of you big strong bulls of the woods are quiet and well-behaved, docile homebodies.

GLD: Well, as I say, you learn to live with people. That's why a fat man is always cheerful. He can't run; he has to be friendly. In regard to the spring of 1921, in the state of Washington the burning season ended as of the first of June, and it was considered smart to get your burning done before the first of June. There was a lot of slash upon the Cedar River Watershed where the city of Seattle gets its water, and they went out merrily on May 29 {or} May 31 and touched off all this slash. They had a terrible fire that burned up a lot of valuable equipment and ran wild for about a day and then all of a sudden quit. Nobody knew what had happened. The weather reports showed that May 30 and May 31 were days of low humidity—the worst days they could have chosen to set off slash. Later Bush checked his theory. In Minnesota suit was brought against the government for the fires along the railways which were then under the control of the government. Bush discovered that the days the fires burned there were the days of the lowest humidity they'd had in years and years.

ERM: How long did it take him and others to persuade people who operated in the woods that this was a valid theory?

GLD: His theory made so much sense that it was quickly adopted. I don't know when the state laws regulating operations during periods of low humidity went into effect.

ERM: In your work over the years you had quite a lot to do with state legislatures, didn't you?

²³ See footnote 10, page 15.

GLD: Indirectly, through the industry groups.

ERM: Never directly as a representative of your company?

GLD: I've sat on committees, met with state groups.

ERM: You never went directly to the state legislature to lobby for something?

GLD: I never did any lobbying, we left that to Charlie Cowan, but I've talked to individuals.

ERM: You've buttonholed individual legislators.

GLD: Well, very rarely. Charlie did most of that for us. But I've sat on groups and discussed things with Charlie and worked for him.

ERM: Charlie Cowan was the industry's legislative lobbyist for fire protection in Washington?

GLD: Yes. Very effective too.

ERM: What about taxation in the industry what did you people have to do with that?

GLD: Through the Industrial Forestry Association we made a study on timber taxation. This was very effective.

ERM: I'd like you to spell out for me a little of the detail of your experience in eastern Oregon after you moved down from Alaska in 1918. In particular, I'd like to know all that you can relate about your experience cruising timber, getting it ready for sale, how you went about it, the factors that you and others in the Forest Service were looking for and that guided you in the establishment of policies that were developing at this time for the uses of that timber.

GLD: The early development of the pine areas in eastern Oregon started with the developments around Baker, Oregon. The building of the Baker to Sumpter railroad, to supply the gold mines around Sumpter, opened up a considerable body of timber. Later on, the railroad was extended to Prairie City at the head of the John Day River. Quite early, around 1910, the Forest Service started to sell timber in that general area at the heads of the John Day and the Burnt rivers around Whitney. For years that was the main development of the pine forests in eastern Oregon. About 1916 the areas on the Deschutes River were opened up by the building of the railroad from the Columbia River; and we had the big developments around Bend, Oregon by Brooks-Scanlon and Shevlin-Hixon. A little earlier (around 1910) the Klamath area was opened up by the building of the Southern Pacific from Weed, California, to Klamath Falls, Oregon. The only other remaining large blocks of timber were the area around Lakeville, which was opened up by the railroad coming up from Reno, and a smaller unit around Prineville which was opened up again by the building of a city railroad from the Deschutes line into Prineville. That left one large block of timber that had never been scratched by more than portable mills. It was in Harneyand Grant counties in the vicinity of Burns, Oregon. One reason why this had never been developed was that there was no railroad within a feasible distance.

ERM: Didn't the Union Pacific or the Northern Pacific come into Burns?

GLD: No. Sometime prior to 1920 the Union Pacific extended a branch up the Malheur River from Ontario to Crane. Crane was thirty miles from the county seat at Burns, but this wasn't much of a problem because most of the stuff being shipped out was cattle, and they could drive them the thirty miles to Crane. Of course that wasn't feasible for a sawmill. The people of Burns had been talking about the vast, locked up resources of Harney and Grant counties for many years. Finally,

about 1920, a timber cruiser by the name of Ephraim Barnes came into the area and started picking up some small tracts of private timber. There was no large ownership of private timber in that area except the military grant lands on the north fork of the Malheur, which was owned by East Oregon Land Company. Barnes started picking up small tracts around the Silvies River drainage. He was quite an interesting character; very crude in many ways. He was always looking out for Mr. Barnes. He got the local chamber of commerce in Burns to petition the Forest Service to open up a block of timber on the Silvies River adjacent to Burns.

ERM: This is the Malheur?

GLD: This is the Malheur National Forest, yes, although part of the timber adjacent to Burns lies in the Ochoco National Forest in what they call the Snow Mountain unit west of Burns. Members of the chamber of commerce came into Portland and discussed the proposed sale with Fred Ames of the Forest Service. He agreed to look into the matter. In the fall of 1921 Fred Ames and I took a trip down through southeastern Oregon, visiting the Deschutes and Fremont national forests. I recall the trip because I was the proud possessor of a brand new Ford car which we used. The Forest Service did not have any of its own vehicles at that time.

We had agreed to meet Barnes in Burns on a certain day, but on the way from Lakeview to Burns we stopped off a day or two and enjoyed the good duck hunting. When we arrived in Burns, we found Mr. Barnes quite upset over the delay. We went through the Ochoco part of the block of timber and up into Silvies Valley. I was quite impressed, frankly, with this body of timber.

ERM: You were impressed by its high quality?

GLD: Its quality and the logging conditions.

ERM: How did it differ from other timber that you had seen in that area?

GLD: The terrain was more favorable, more gentle. The Silvies Valley extends due north from Burns and centers around the little post office of Seneca, which is up in Silvies Valley. There's no timber in it, but it's surrounded by this fringe of timber. The unique thing about the topography is that, outside of the mileage added by having to run railroads around the edge of the timber, it is good for railroading because the grades are very moderate (about four percent) to within a quarter of a mile of the summit. We spent about a week up there and got a pretty good impression of it, then went back to Portland.

ERM: Who accompanied you on this trip besides Ames?

GLD: Barnes was with us all the time and I think some of the local personnel of the Malheur National Forest.

ERM: Do you remember any of them?

GLD: I think C.C. Reid was supervisor of the Malheur at that time. We went back to Portland and pressure increased from the chamber of commerce, mainly spurred on by Barnes, who had a mercenary interest in it. I found later that he had been negotiating with some of the larger lumber companies, possibly Edward Hines and Brooks-Scanlon, to open up the tract. He was trying to block out the private timber, which was quite a limited amount.

ERM: Did you find that there was an interest on the part of Hines to get into this area?

GLD: We did not know who Barnes had contacted. Meanwhile Barnes had gone back to his local congressman, Nicholas Sinnott. The upshot was that the Forest Service, through Colonel Greeley,

the chief forester, agreed to put a block of timber on the market, and furthermore to have it ready for sale by the first of July 1922. Inasmuch as I was familiar with the area, I was told to make a cruise of the area along in March. This country gets a very heavy snowfall and the normal breakup will not occur until late in April. I started to organize a crew and was fortunate enough to get experienced men from the Forest Service. After scouring the region for all the available snowshoes, we landed in Canyon City early in April or late March. It was bare in the low valleys there, so we hired a four-horse team to haul our camp equipment up to the timber line. You have to go up over a high divide to get into the Silvies River drainage. Near the summit snowline we were met by a sled team and then moved into the Bear Valley ranger station. It was unoccupied at the time. One of the members of our crew, Ernest Wallenburg, was a very talented man who had just returned to the Forest Service after being out for several years. Even as we moved in, I could see that we were going to have a problem in establishing headquarters. So I suggested to Wallenburg that we drop him off at a ranch along the way with a compassman to work out of there on his own and take care of a certain area. That was a lifesaver because I was able to forget that area, and he came back to the regular crew at the very end of the job. The rancher was a very interesting character known as Coyote DeWolf.

After we got to the Bear Valley ranger station, we started on the job. There was about five feet of snow on the ground. The first thing we had to do was establish control lines. I'd had a little discussion in the Portland office as to the intensity of the cruise. With the vast acreage to cover (seventy-odd thousand acres), it was apparent we could not do the ten percent cruise normally being done in pine timber. It was suggested that we only go twice through a section, which would be a two and a half percent cruise, but I objected strenuously to that because then we would have a cruise that would not be possible to build up to a more intensive cruise. But if we could go once through a forty, or four times through a section, on a five percent cruise, we could always add another strip and make it a ten percent cruise, which was normal.

ERM: Who was urging the two and a half percent cruise?

GLD: My superiors. So I said, "All right, I'll try my five percent method; and if I find out I'm falling behind, I will go back to the two and a half percent cruise." But we made it.

ERM: You made the more intensive cruise.

GLD: By working some long hours.

ERM: How did your crew respond to this?

GLD: It was a wonderful crew. We were on a tight schedule since we agreed to have the map and cruise data all ready on Memorial Day when Jim Girard was going to come over and assist in the appraisal. As an incentive, I told the boys that if we got through on schedule, we would all go down to Canyon City and help celebrate. I think it was the 75th anniversary of the discovery of gold in the city. So we worked like hell and made it. When we got down there, I made arrangements to make our camp down in the Forest Service garage so it wouldn't be any expense to the boys for meals and lodgings. The first night they had a very good time, but there were all so anxious to get home that they all pulled out the next morning. So it was an inexpensive pastime. We enjoyed it very much. The supervisor was very thoughtful and had a bottle of moonshine to help us on the way when we got down to Canyon City.

ERM: How long did the cruise take you?

GLD: Two and a half months. We had Fred Matz with us who was a very capable man, probably the best cruiser the Forest Service ever had and chief of their parties many, many years. I had Fred stay in camp and make the map from the daily reports of the men so we were never behind on the map. Fred and I did all the control running of the sections. When we'd get ahead, Fred would

go back on the map. I was busy all the time filling in. Somebody would be sick or some thing and I'd take a job of cruising or running compass, or anything to keep the ball moving, besides doing all the control work.

ERM: How would you describe that control work?

GLD: It consisted of running compass lines on a section line—trying to find the sections so you'd know where the men were all the time. It was a wonderful crew. We worked, as I said, most Saturdays and Sundays in order to get it done, and we still had enough energy so that when we found an old basketball goal post in the yard of the ranger station, we played in our spare time with an old ball filled with feathers and hay. We made one move out of the Bear Valley ranger station after the snow left during the breakup. We had quite a time moving. When that country starts to thaw out, the ground just gives away because of the heavy frost. We made, I think, two camps after we left Bear Valley to cover another part of the area. It was a very successful job, and we were all very proud of it. When we got through, we had a map that proved to be accurate enough for the job although we had had a problem with our control and were some fifty feet off on base elevation. But the general contours were all right. They had a hearing afterwards in Washington, which is a matter of record. It's a government report about three inches thick that was prepared during the time when they were combating Fred Herrick. Barnes got up and made a statement that our cruise was fifty percent off. Actually, the whole area checked within five percent, which is remarkably close. We did the whole job at the unbelievable cost of five cents an acre—reports, maps and everything.

ERM: What role did Girard have in this?

GLD: Jim was considered the dean of all the logging engineers in the Forest Service. The Washington, D. C. office felt that there was quite a bit involved in this whole setup and it would be well to bring Jim into the picture. So Jim was assigned to make the appraisal with Bruce Hoffman, the logging engineer out of Portland, and myself assisting. Jim came over about the time we were finishing the cruise. It was quite interesting because Jim had developed a new system of cruising and he was very anxious to check it on our cruises. So Jim and I cruised together for several days, and we were within five percent of each other. And then what pleased me more was that he checked all the maps that we had completed and found that our maps were substantially accurate. Jim had quite a bit of confidence in the information we had collected. After the job was done, Jim stayed for about two or three weeks making the appraisal. Bruce Hoffman and I worked with him.

ERM: What do you remember about that?

GLD: Well, it was a standard examination of the area, figuring out the logging problems. One of the main problems was the feasibility of building a railroad from Burns to the timber. That was thirty-five miles. The problem was complicated by a box canyon in the Silvies River in what was known as Lower Silvies Valley and the main valley around Burns. After checking the problem of going up the canyon, we decided that the best solution would be to drive a tunnel through the summit between the two valleys, which was done later on.

The timber was appraised at \$2.75 a thousand, which was a very equitable appraisal, I felt, because the timber was of high quality and the logging conditions in the area, outside of building the railroad, were not difficult. It was in line with the going prices in the Sumpter Valley in the Whitman National Forest, which were in the neighborhood of \$3.00 or \$3.25. Barnes protested violently that we were cockeyed, that it shouldn't be appraised at over \$2.00. Apparently, he had implied in his negotiations with various interests that he could get the timber for \$2.00 .

ERM: What made him think that he could do that?

GLD: He thought that he could do it by using a lot of pressure and arguing about how difficult it was to operate. The sale was advertised at \$2.75 and there were no bidders. In the light of what Barnes was doing before the final bids were submitted, it was quite likely to happen.

ERM: Assuming, of course, that Barnes was blanketing all of the potential buyers with his appraisal.

GLD: He apparently spread the news about. As I recall, prior to the opening of bids in the fall of 1922, Colonel Greeley was on the coast for a conference in Portland which I attended. Barnes was quite vocal and asked the Colonel, "What would you do in case there are no bids? Would you put it up for \$2.00?" For once the Colonel talked out of turn and instead of saying, "We'll meet that situation if no bids are received," he said, "Yes." Well, I think that was just a go-ahead not to bid. So after we found there were no bids at \$2.75, the timber was readvertised at \$2.00. Fred Herrick then came into the picture. Herrick was operating the mill at Coeur d'Alene, Idaho. He'd had a lot of dealings with Jim Girard in connection with sales around Coeur d'Alene.

ERM: Was he an independent operator or did he have an association

GLD: He was an independent operator, a man with a reputation of being quite undependable. He even had a habit of issuing bad checks to his men. But the interesting thing was the average lumberjack that received Fred's bad checks would just chuckle, think it was kind of cute, hold the check for so many days, and by that time there would be money in the bank. I've had loggers out on the fire line who thought he was quite a hero. That was surprising because the average lumberjack doesn't like to get a check that bounces.

ERM: Why do you suppose they felt that way about him?

GLD: He was kind of a lone wolf, fighting everybody else. They thought he was against the big operators.

ERM: Against the big guys?

GLD: Yes, that's it. Well, Fred called in Jim knowing that he'd been over to Burns and asked Jim what he thought of the proposition. Jim told him just what we had found—that it was a desirable type of timber but required quite a heavy outlay for railroad construction from Burns. Meanwhile the Union Pacific had agreed to extend their road from Crane into Burns with thirty miles of standard gauge. So that problem was solved. That was the only part that Jim and Fred played. Fred Herrick sent his own men over to check the area, and they apparently reported favorably on the situation. Herrick felt, apparently, that if we appraised the thing originally at being worth at least \$2.75, he was justified in paying that price, so accordingly he bid \$2.76. When the bids were opened, it was found that Herrick had bid \$2.76. The other bidder was Brooks-Scanlon at \$2.00. Apparently their thinking was that Mr. Barnes had the situation well in hand. Later on I got to know Ned Garrish of Brooks-Scanlon very well. Ned was the assistant logging superintendent and was always asking me how everything was going on over at Burns. He greatly regretted that Brooks-Scanlon hadn't bought that timber originally.

ERM: Were there only two bids received?

GLD: Yes.

ERM: Would that be a matter of record?

GLD: I think so.

ERM: Where would that record be found?

GLD: There was a report put out by a special hearing in Washington, I think it was, because it was an official government bulletin, a map and pamphlet sort of document. The sale was awarded to Fred Herrick, and immediately Barnes and all his friends and cohorts, including the editor of the [Canyon City] Blue Mountain Eagle began a very biased attack on Fred Herrick and the whole sale, so that Fred started opening up the timber under very difficult conditions from a public relations standpoint.

INTERVIEW III, SESSION 2

George L. Drake San Diego, California February 23, 1967

Elwood R. Maunder (ERM): All right, George, go on with what you were saying about Fred Herrick.

George L. Drake (GLD): Through the years, Fred Herrick operated on quite a shoestring, as I have previously indicated, although he had connections with one of the banks in Spokane. Apparently Fred Herrick felt that he could finance this operation through a sale he'd made of his timber properties in the South.

ERM: The Scotch Lumber Company in Alabama?

GLD: Yes. Since he was selling that and getting payments coming in, he thought he could finance it.

ERM: I wonder if that's when W. D. Harrigan bought into it?

GLD: I'm not sure. Well, Fred Herrick hired Jim Girard to manage the operation, and Jim in turn hired Frank Klobucher, a Forest Service logging engineer, as his assistant. They were a very effective team.

ERM: They both left the Forest Service to do this?

GLD: Yes, they left the Service and went into private industry. They decided first on a mill site. They selected a site west of Burns near some hot springs, which was a very good location (it is now the present town of Hines). They had the advantage of a natural hot water pond. They designed a very efficient mill with a steel structure and started to work on the mill as well as the railroad. The first project was to get the railroad up there. Work progressed reasonably fast until they ran into the tunnel, which took quite a bit of time to build.

ERM: Meanwhile they were running on the capital that Herrick had got out of the sale of this Alabama tract.

GLD: That was the basis of the money. It soon became apparent that there would be financial problems because there wasn't enough money coming in to carry this on. All the time they were being pressured by local interests spurred on by Barnes who asked why they weren't doing more. Barnes's idea was to run Herrick out of the picture if he could, which put increasing pressure on the Forest Service.

ERM: Was Barnes acting, do you suspect, as the agent of any other company?

GLD: I wouldn't say, but I would question it. The situation got acute, Herrick was a very unreliable man to talk to. You'd try to pin him down, and he'd start talking about hunting cougars and things of that kind. We finally had to pin him down and get him to agree that he would spend so much money every month on the railroad construction. That involved sending someone out of the Portland office to make a periodic inspection of the progress. That was my job part of the time. To show you the atmosphere that we worked in, every time you'd go up there, the local Canyon City paper, which was the main spark of opposition, would carry a sarcastic report on what we were doing up there. I was honored by being described as a high-powered pencil pusher from Portland.

- ERM: What was your relationship during this time with Jim Girard and his associate who were really running the show for Herrick?
- GLD: We had to depend on them and check with them on the money being spent. We kept a record of the number of stations that were being built on the railroad and the money expended.
- ERM: What was Jim's attitude as he expressed it to you in those months?
- GLD: He was doing the very best he could with the money that he had at his disposal.
- ERM: What was his private opinion of the chances of accomplishing Herrick's objective?
- GLD: Well, I think that was a matter for the gods to decide. Nobody could tell where Herrick was going to be able to dig up money. He'd borrowed, undoubtedly, some money from the bank in Spokane.
- ERM: Right, but Jim must have had some private opinion as to where the show was going.
- GLD: That would be a real personal thing to ask, but I knew Jim was naturally quite worried. He didn't know where he was going to get the money to meet his next payroll. The thing finally got to a point where the money was running pretty thin, and it was apparent that Herrick didn't have the money to go ahead and finish the job. So it became known that the Herrick interest in the deal could be bought. A man named Frank Gardner from Portland, a timber broker, got involved in the thing and started scouting around for prospective customers.
- ERM: What was Brooks-Scanlon's attitude at this point?
- GLD: They kept pretty much out of the picture. I don't recall their being involved. They were just sitting back watching.
- ERM: Since they were the only other bidder on the cutting rights to begin with, you would assume that they were keenly interested in following up if there was a chance.
- GLD: They were apparently hoping that it would some day revert to the \$2.00 price. Of course, when it was readvertised, it had to be readvertised at the \$2.76 price. About that time Luther Moore from Orange, Texas became interested in it. I went to Burns with the Luther Moore people—Fletcher Stark, who was the president, and some of the other members—and we went over the property. It was quite an interesting trip. Fletcher Stark was quite an interesting character. He was the fairy godfather of the University of Texas football team. He was the man who got Bible to come down there and coach the team. They were interested, although it was so foreign to what they had been used to down in Louisiana and Texas.
- ERM: Altogether different kind of terrain.
- GLD: They finally decided not to go into the venture. They bought into an outfit down in Arizona on one of the Indian reservations which turned out to be a lemon. Afterwards I got to know Mr. Sheppard of the company and they were kind of regretful that they hadn't spent their money at Burns.
- ERM: How much could Herrick's interest have been bought for at that time?
- GLD: He was supposed to have had \$1,800,000 tied up in that property at that time. Frank Gardner told Fletcher Stark that it would take \$1,800,000 to swing the deal. He was not honest with them apparently, because the sale that was made to Hines eventually was around \$400,000. Had

Luther Moore known that it could have been bought for \$400,000, they would have undoubtedly been very much interested.

ERM: Could it have been bought for \$400,000 at that point?

GLD: Yes, because Gardner was the one that swung the deal. He was hoping to make the \$1,800,000 so his cut would be much higher than at \$400,000.

ERM: I see. He'd get a bigger percentage cut.

GLD: Hines had been approached by Barnes originally, but Hines had not shown any interest in the original deal, and apparently Barnes contacted Hines again, or Gardner did. It wound up that Hines came in and took over the property, and they took over the Herrick contract.

ERM: When was this? 1927, 1928?

GLD: Somewhere along in there.

ERM: Then Herrick was involved in trying to get this show on the road for a number of years, wasn't he?

GLD: This railroad building went on for at least a couple of years.

ERM: Yes, because the original deal was made back in 1922, 1923.

GLD: In the fall of 1922, I think, originally.

ERM: And the transfer to Hines didn't come until 1927 or 1928, so Herrick was involved in this development for five or six years.

GLD: Well, not that long. Probably three or four. I'm not sure of the dates. They're a matter of record.

ERM: So there was some justification for the concern of the people in the area about this being completed?

GLD: Well, they'd been led to great hopes that there was going to be a sawmill at Burns, a development in Harney County. Of course, Harney County was interested not just because of the payroll in Burns but the returns from the national forest receipts—the twenty-five percent they'd be entitled to in the county. There was nothing undercover, simply a lot of pressures being applied. During this whole period when they were trying to get Herrick out of the picture, he worked under the terrific handicap of this local pressure. I recall one time there was a petition sent out around Harney County (that was early in the game), which Barnes instigated. There was a rodeo going on in Burns at the time, and they solicited signatures from everybody at the rodeo. So a lot of the people who were protesting had no interest at all in Harney County. Somebody asked Nick Sinnott one time what was the main produce of Harney County, and he said, "Hell, hay and petitions." That pretty well summed it up. It was a government by petition at that time. The Forest Service was under terrific pressure from the local groups.

ERM: Do you remember any of the local citizens who were at the core of that?

GLD: No. We tried to keep out of it, acting as the owner of the timber, not as the promoters. We had plenty to deal with.

ERM: Why was it that the switch in ownership or contract agreement with the government had moved from Herrick to Hines for only \$400,000 when Brooks-Scanlon must have been willing to pay considerably more four or five years earlier? Where was Brooks-Scanlon at that time?

GLD: Well, I think they were still hoping that the timber could be bought for \$2.00 instead of \$2.76.

ERM: In other words, Hines was still going to pay \$2.76 for it but they were buying out Herrick's interests for \$400,000?

GLD: That's right. That's what it finally went for.

ERM: I see. Was the \$400,000 then primarily to buy Herrick's railroad and other equipment?

GLD: All that he had spent on the project including the mills still under construction. Although it was only partly constructed, all the money that was spent by Herrick under Jim Girard's supervision was well spent. There was nothing wrong with anything. It was well engineered and well constructed.

ERM: Did the Hines people retain Girard?

GLD: Oh, Mr. Barnes had a hand in advising the Hines people, and one of the silly things they did was to hire a logging superintendent from the West Coast who was used to operating in the heavy Douglas-fir region.

ERM: Who was that?

GLD: I forget his name. But he came up there and the first thing he decided was that our map was all wrong. He spent a lot of money making an intensive map and when they put their map on top of mine (the five cents an acre map), they coincided exactly except for the basic elevations, which weren't material. They started constructing some railroad on the first logging show, which was Shirtail Creek, with the same methods used in developing a Douglas-fir operation—trying to get the railroads close to the timber. I saw instances where they were building excessively costly railroad when they could have stayed in the draw, as we anticipated, and then skidded the logs down to the draw.

ERM: Weren't the Forest Service personnel in a position to try to influence their planning or thinking at that point?

GLD: You don't tell an operator where he's going to locate his railroad. So they went ahead, and wasted thousands and thousands of dollars in poor railroad location.

ERM: Who is responsible, do you think, for the bad choice of man in this case?

GLD: Well, I think Hines took Mr. Barnes's advice.

ERM: Who in the Hines Company?

GLD: Pettibone was the man who was over there. He was a very fine man, but not familiar with logging in eastern Oregon pine conditions. The upshot of it was that Mr. Barnes got in the doghouse and he and this high-priced logging superintendent left the company. Hines came out there with a lot of ideas that were not practical. One of the things that tickled me—one day I went over there to check what they were doing. A high-priced efficiency expert had installed on the locomotive and all of the tractors a device that would record when the machine was in operation. It was a pendulum affair with a clock, so if the engine was idle the thing wouldn't show anything on the graph. Well, the boys got wise to this. They had a key they used to jiggle

the machine every morning so it would look like the tractor had been working like mad when they weren't working. It was readily apparent that they weren't working steadily mainly because of the poor location of the logging layout. Then Ernest Wallenburg came into the picture as general manager over there and was very successful.

ERM: What do you mean very successful? When the company took over, it was about 1927 or 1928. What was happening to the market for lumber at this time? It was going to hell, wasn't it?

GLD: Well, that didn't help any. But Wallenburg was the first able manager they had over there in the operation.

ERM: So they went ahead and finished the railroad.

GLD: They finished the railroad, yes, and built a mill.

ERM: And then what did they do? Did they have any market for what they were producing?

GLD: I think they had as good a market as the average pine operator did. Hines was in a good position. They had been successful operators and had a very strong marketing setup in the Chicago area.

ERM: They had their own retail operator?

GLD: Yes. One thing that made the proposition more successful was the change from railroad logging to truck logging. After the first unit was approaching its normal exhaustion, the next unit was to go up Bear Valley over toward the Malheur River. They built truck roads in that area.

ERM: In other words, they came just at the tail end of railroad logging.

GLD: Yes, things were changing.

ERM: Were they one of the first?

GLD: No. They changed about the same as other pine operators. They acquired cutting rights over in the Snow Mountain unit on the Ochoco, which was a very good body of timber. That was developed by truck roads rather than by railroads. Then they purchased a big block of land grant timber over on the Malheur, which they could bring into the Seneca and transfer.

ERM: What was the reaction then of all the people in the community?

GLD: Well, of course, people are always happy when there are payrolls. Hines did what Herrick had not been able to do because of limited finances.

ERM: And Hines with larger resources went ahead and did the developing on a vaster scale?

GLD: Yes. Brooks-Scanlon would have been able to do it too.

Mr. Barnes wound up without much to show for all his endeavors, I think as a hotel operator on the Columbia River somewhere. He was a promoter, pure and simple, without the finesse to do a good job.

ERM: Jim Girard went back to Portland and joined Dave Mason then after this, did he not?

GLD: No, I think Jim went back to the government for a while. Jim was a great guy. He was probably the keenest mind that I ever encountered. He had an uncanny ability to make difficult things

simple. He evolved a lot of practical rules of estimating timber. The Girard Tables are still looked upon as excellent. He was a man with very limited education but with a terrific keen mind. He worked with the government during World War II as an advisor on procurement. Jim was so practical that when he'd see anything that didn't make sense, he wouldn't hesitate to change it. I remember Jim told me one time that the government had a big order in for tent pegs. Well, tent pegs are some thing you drive in the ground and walk off and leave or break off. They had specifications that took the highest grade of hardwood lumber. Jim just washed that right off and started buying practical grades. Jim was a very wonderful fellow. I used to encourage him to come to Shelton just to let him talk to our young foresters. They just worshiped Jim.

ERM: He was a great storyteller, wasn't he?

GLD: And a man with terrific energy. I remember when he came over to check on our cruising. We were normally going to work at seven o'clock in the morning. But Jim would be up at four o'clock in the morning, before anybody got up, trying to get somebody to go and pitch horseshoes before they went to work. When he took a drink, he really gulped it down. But he was a delight.

ERM: Was he a good drinker?

GLD: Well, he knew how to handle it. He was from Tennessee originally.

ERM: Are there any other stories about Jim Girard that might give a little flavor of his character?

GLD: He had terrific confidence in himself, and we all laughed about it. One time we were working out this proposed route for the railroad. We went through the pass down in the valley and were trying to determine the percentage of grade the railroad could get down. Jim took his Abney out and set it on four percent, which was the maximum grade you could run a railroad, and he said, "We can get on there in four percent. I'm taking a sight down there." Way down in the valley, probably a couple of miles, there was a lone tree and Jim took a sight on it. Well, all you could see was just a little dot of green. We walked down the two miles and when we got to the tree, Jim went right up to a limb just the height of his eyes and said, "That's the one I sighted on." We just loved him, so we enjoyed it. The more he exaggerated, the better we liked him.

ERM: Who are some of the individuals that played an important part in the development of that untapped timber area?

GLD: First of all was this timber cruiser, Barnes, who was interested in it as a means of picking up some money and started agitating for the opening up of government timber. He also took care of himself by picking up stray pieces of private timber in small areas which he, in turn, eventually sold to either Hines or Herrick. He was not exactly on the up-and-up; and though his advice was taken, I think, by some of the timber companies, it wasn't sound advice and didn't help things. He just kept the pressure on.

Another strong person was Jim Girard. It was through his vision that the layout of the original development was formulated. It was that layout that was afterwards carried out and finished by the Hines outfit.

ERM: In other words, the location of the mill there at Burns was really a part of the genius of Jim Girard?

GLD: Yes, he picked the site. It was a good location as far as I know.

ERM: How much change did Hines make in the mill itself when they came into the picture?

GLD: Not too much. It was the last word in mill construction of that time. It was a steel frame and concrete foundations—all of which wasn't easy to change. They probably made some changes in the final development because very few mills ever wind up the same as originally planned. As far as I've always understood it was a very efficient mill, Hines probably has most of the credit for the final layout and the finishing.

ERM: Herrick never milled a stick of timber all the time he was there?

GLD: No.

ERM: What finally became of Herrick?

GLD: I don't know what did happen to him. He married a young wife which should have prolonged his life, or shortened it, I don't know which. I think he got too old to hunt cougars anyway. He was a character.

ERM: Could you recount some of the attitudes of certain people in the industry towards the Forest Service?

GLD: There was a natural animosity toward the Forest Service when they first started administering the national forests. It was the beginning of certain restrictions that the economy of the West had never known. Nobody had ever told them how to do things or what they couldn't do. But through the years, I think the Forest Service matured and became more practical, and the industry mellowed on its part. Men have left the Forest Service and gone into private industry. A few have then criticized the Forest Service and hurt themselves and industry more than they've helped. But others have retained the respect of the Service and helped develop a harmony.

ERM: Can you think of some examples of that?

GLD: Well, Dave Mason is one example, a man who was originally with the Forest Service and went into private industry as a consultant and was very helpful as a go-between, because he understood the objectives of both industry and the government. Jim Girard was another excellent example.

ERM: Certainly you were an example of that.

GLD: Oh, I was one of those.

ERM: Other members of your profession haven't always been as generous about their old colleagues.

GLD: There were a few cases where they thought they were feeding the industry what it wanted, like criticism of the government and its policies.

ERM: How would you characterize Emanuel Fritz and his role in this sort of thing?

GLD: He's very critical, but people who know Emanuel judge him on the merits of what he does. I don't think he ever had any financial interest. Some of these other fellows have done it to better themselves financially. I think with Emanuel it's a matter of principle. I think he'd argue with God on any subject that you want to bring up. He'd probably be right too.

ERM: How do you evaluate Emanuel Fritz's contribution to American forestry?

GLD: Emanuel has been the father of better forestry in the redwood region. He has been listened to.

He's been the one pioneer factor in getting better forest practice in the redwood region, or trying to.

- ERM: Would you say he played the role that Austin Cary did in the South?
- GLD: I met Austin Cary in Portland when he was out on the coast doing jobs. I don't think he and Emanuel are in the same category. Austin Cary was more of a teacher type, while I think Emanuel is a man with very firm convictions who tries to do a thing by explaining the logic of doing it.
- ERM: You mean Emanuel wouldn't take his friends out into their forests and show them by some demonstration?
- GLD: Not so much by demonstration, but by explaining the basic reason behind it. When we first went down to northern California, Emanuel ran a little course in the logging management of redwoods in Scotia one time. John Yingst and I went and spent three very worthwhile days listening to Emanuel and then went out in the field where he illustrated what he was thinking. But it was always words from the standpoint of a technician explaining things, rather than, "This is what you boys should do." Austin Cary would probably have presented a more down-to-earth New England type of explanation. But Emanuel had a lot of information and they listened to him.
- ERM: I find some people in the Forest Service who dislike Fritz for his outspoken criticisms.
- GLD: Well, he's always been critical of the Forest Service, sometimes perhaps unfairly, but he picked up some weak points which people don't like to have mentioned to them, and they might have disliked his way of doing it because he was inclined to be a little bit sarcastic.
- ERM: You came out of a long period in the Forest Service, and I have always had a feeling that, for all the many years you have been in private industry, you still think of yourself as a U. S. Forest Service man with a loyalty to it.
- GLD: I'm like a graduate of a good university who feels a sense of indebted ness to what the school has done for him. I could not come out of Yale and say to hell with Yale because I'm out of it. I do owe some thing to it. It was very good training with some very fine, conscientious people.
- ERM: In the years you were with it.
- GLD: That's right. We were working on a pretty sound philosophy. Not that I always agreed with everybody, but I think people judge you by whether you are loyal to the people that you have been associated with. It's like a man coming out of a family and all of a sudden his brothers and sisters are no good. You kind of wonder who was no good, the brothers and sisters or the man himself.
- ERM: Tell me more about the situation up in the Burns area and what developed after Hines came and took over the show. You continued to be an observer of what was going on.
- GLD: I left the Forest Service in 1930, so I didn't go over there any more. But I was probably more familiar with eastern Oregon than most people in the Service during the time I was there because my field of activity was in eastern Oregon.
- ERM: Did you know Walter Meyer at this time?
- GLD: I knew him, yes, when he was at the University of Washington.

An interesting thing about that eastern Oregon country—before I left the Forest Service, I was prone to. put down in a memorandum what my thinking was on a certain thing. I was always trying to look ahead to the future: how was this country going to be developed? There were

quite a lot of good-size stands of timber in eastern Oregon that were isolated from the existing railroads, either up on mountains or widely separated by sage brush lands. I wrote a memorandum anticipating the future development of those areas in which I predicted it might be fifty years before they were operative. When I went back ten years afterwards, I found most of them were beginning to be operated. The whole story was the coming of the highway system and the development of better trucks. Areas that couldn't have been logged by railroads because of the costs were being operated by trucks, and that's true today. Today in eastern Oregon there are hardly any large bodies of timber left.

ERM: Would you include among these the timber that Gilchrist, for example, is operating in today?

GLD: Well, that was opened up quite early because it was quite accessible to railroad.

ERM: Where are these areas you predicted would be opened up?

GLD: They were areas on the branches of the John Day River. One of the interesting things in the development of the Gilchrist properties down in Oregon south of Bend was that Gilchrist, like many successful operators, had the dream of making a model community. So when he opened up the Oregon property, which he probably should have sold to Brooks-Scanlon, he built this very attractive town with public buildings and schools. It had very nice residences for his employees. He was out there one day, and very curious to get a reaction. So he said to one of the old-timers, "Jim, how do you like it out in Oregon?" "Fine, Mr. Gilchrist, fine." He said, "How do you like this house we built for you." "Oh, that's wonderful, Mr. Gilchrist," he said, "that was the first time I was ever able to go to the toilet in my own house."

ERM: Why do you say he ought to have sold it to Brooks-Scanlon?

GLD: Well, I don't think it was an economic unit; there wasn't enough timber there to justify his investments.

ERM: And yet ultimately it became a very profitable operation.

GLD: It probably has, but the life is limited. There's not much timber behind it.

ERM: Doesn't he have quite a bit of Forest Service timber or Indian land timber?

GLD: He's buying what he can, but it's competitive with Brooks-Scanlon.

ERM: How well did you know the Brooks-Scanlon people? You must have had a lot of contacts with that outfit.

GLD: I had a lot of dealings with them during the early-day purchases of government timber. They were very fine people, both them and Shevlin Hixon. Shevlin Hixon had a very interesting character who ran the woods named Jack Meister. He was a wonderful fellow and very keen. Sam Blakley, Brooks-Scanlon's superintendent for years, was a very fine old fellow but rather hidebound in his ideas. I had a little bit more trouble getting along with him than I did with Jack Meister because he'd agree with you and go along with you instead of argue. But we got along fine. I don't know whether I told you about my contact with Jack Meister on the-development of tractor logging methods in the pine country.

ERM: Yes, in our first interview in 1958, I believe. And that was the real beginning of tractor logging?

GLD: That was the beginning of tractor logging as worked out by Jack Meister in the middle twenties.

ERM: Did it come out as a part of the discussion at the Logging Congress?

GLD: No. I mentioned the fact as a matter of record, and everybody knew jack was doing it. Then from the original old bigwheels came the Athey track and then your modern arches. The Athey track hauls more easily than the bigwheels did. But it was jack's idea to put the drum on the back of the cat and the fairlead and pull them in by cable rather than having the cat squirming around in there. When that pumice soil is dry you can walk and disturb the ground within feet of where your footprints go, and when a cat moves around—well, I've seen young stuff disturbed twenty feet away, just pulled out by the roots. When it's wet, the soil gets compact, and you don't have the damage. But I think that's an illustration of how to meet a problem like that. Find out what is causing it, what can we do, where will we apply our efforts to make corrections? Jack was very cooperative.

ERM: This, to your knowledge, was the first use of the tractor in the woods?

GLD: Not the first use, no. We had used them earlier than that over in Baker County, but there were no soil conditions like that. That was hard soil.

ERM: Then the Baker County operation was the first use of the tractor in the woods to your knowledge?

GLD: That was my first experience. That was right after World War I when they brought in some old army tractors, Bests or Holts.

ERM: There has always been a lot of speculation.

GLD: It developed in many places, probably. The first ones, I guess, were those old steam tractors they had in California for hauling logs and then the steam log haulers back in Maine for hauling sleds, but they weren't logging, they were just transporting like a locomotive.

ERM: Do you recognize any one company or any one person as being the originator of truck logging?

GLD: Truck logging started in many areas, I think, when trucking spread nationwide. Problems not only in the lumber industry but in every other industry in the handling of materials forced development all along the line—better chassis, better gearing setups, gear ratios, and generally better construction.

ERM: Were the truck manufacturers themselves involved in trying to sell the industry on the it use?

GLD: They naturally were.

ERM: Before it really became accepted?

GLD: It was accepted in a small way from the start. Al Moltke was quite a pioneer in truck logging.

ERM: I did an interview with him in which he spelled that out.²⁴

GLD: Something was developing everywhere in the use of trucks. What gave impetus to the development of truck logging, especially in the major operations of the Douglas-fir region, was not only the development of better trucks (which was part of the picture), but the fact that most of the operations were getting into such rugged country that it wasn't feasible to use railroads

²⁴ Typed transcript of tape-recorded interview with A. W. Moltke conducted Elwood R. Maunder and George T. Morgan, Forest History Society, Santa Cruz, California, 1960.

anymore. You couldn't get high enough on the hills. With trucks you could get places you couldn't dream of getting with a railroad and of course that made the interest in truck logging much greater.

There was a lot of know-how developing among some good truck men. For instance when we started our first truck operation at Simpson, I had a very successful truck operator by the name of Cy Shumate. He and his boys were a very wonderful organization. It was a family affair. Old Cy was a native of Virginia, and it was the old patriarchal thing with the father advising the boys, and the boys asking advice of the old man. I soon found out that he had a good organization—knew where the trucks were and kept them working in the right place. One day I said to Cy, "I just enjoy watching you and your boys work. This is a wonderful organization you've got—the-loyalty of the boys and their coming to you for advice and your giving it to them and giving them responsibility." "Yes," he said. "You know, they're pretty good boys and take a great interest in everything. In the morning before they have breakfast, when they go out to take a piss, (of course, they were southerners) they generally kick the tires to see whether they are inflated or not, and if they aren't inflated, then they pump them up before they go to breakfast so there is no lost time." I thought that was pretty good efficiency.

When we started, we had them work for us and we watched them work carefully. When we decided to buy our own trucks, I went to Cy and said, "I'd like to hire one of your boys to act as foreman of our trucking operation. We need to learn a lot." So one of his boys came with me. Later we had another one of his men because it's a science in itself. That's where Crown Zellerbach did a beautiful job in truck logging in early days. They had a man named Christenson who was a very successful trucker. They hired him as head of all their trucking operations. Dispatching the trucks so that they're in the right place, not sitting idle, is very important.

- ERM: Is the trend moving away from company ownership and management of its own fleet of trucks toward contracting it out to independents?
- GLD: I couldn't say. But it's always smart, I think, to have some trucks of your own which you run efficiently as you can to use as a measuring stick so you know whether what you are paying for in your contract is reasonable.
- ERM: And would you say that's become the general practice?
- GLD: No, some operations are a hundred percent company-owned and others contract all of it to reliable people with experience.

One of the sound things that developed within a few years (with the help of the Logging Congress) was the standardization of truck design and equipment. They don't make the whole truck in one plant. They buy separate parts and put them together, like Kenworth, for instance. At first there was a tendency to buy different makes, and you had a mixture of parts. As we began to know what we wanted, we specified the type of transmission, gear ratios and so forth so if anything happened, we could shift the parts from one truck to another. We found out what kind of gear ratios we needed for our particular country, and it was helpful for drivers too. They were familiar with every truck. It was found very early that a truck is like everything else. You've got to have the right maintenance. If a truck isn't running properly it isn't earning you any money, and big improvements were made in cost-keeping in maintenance facilities.

- ERM: Do you feel that Simpson was responsible for any innovations?
- GLD: No, I don't think so. I think we were in the lead in trying to build up good, efficient repair facilities. When we built our first shop at Grisdale, I went around to many operations to check on what they were using for repair pits. I found a lot of screwball things that were either unsafe or inefficient. You need a pit so a man can get underneath to service the trucks. Some of them were

built with concrete steps so a man with greasy shoes or cork boots could fall and kill himself. We used wooden steps and put grease control facilities down in the pit so the mechanic didn't have to pack them down. All that helps out. There were a lot of good shops. It's smart in this industry to visit around. That's one of the good things about the Logging Congress. You make contacts, get to know people, and see what the other fellow is doing—what's a good idea and what you can improve on. Loggers are observant people. They have to be because every problem they've got varies with every square foot of ground. No two places are alike.

- ERM: It's interesting that within the industry there always seems to be an openness to share knowledge.
- GLD: Well, that's one of the necessities of the industry. You're out in the open. Everybody can see you. If you're running a hush-hush factory, you can put a wall around it and a guard and nobody can see what you're doing. A logger knows he can't do that, and he's kind of a boastful fellow anyway, so when he goes out, he's very proud of what he's doing. He probably ends up by inviting his competitor to come up and see it, and that's healthy. The joy of the logging fraternity is that willingness to exchange ideas partly because you know you can't do anything else.
- ERM: If you can't get them out in the woods to look at what you're doing, then you take a motion picture of it and show it to the Logging Congress.
- GLD: Which a fellow generally sees and thinks, "That's pretty good. I'll have to go up and take a look at that myself."
- ERM: Then you get a big traffic to the scene itself. Is that right?
- GLD: Yes, you welcome people coming in. In turn, I tried to get something out of everybody who came to interview me.
- ERM: George, of the men who were your contemporaries in the Forest Service, the name of Chris Granger often comes up in discussions I have with foresters in both public and private sectors. It appears that he played a very important role in forestry.
- GLD: Chris was a very able administrator, probably one of the keenest administrative minds the Forest Service ever had. He was at Region 6 for a number of years, and later was in charge of the administration of the national forests in Washington, D. C. Whatever he came out with was pretty sound; he wasn't ruled by sentiment but by reason. I think he built the Forest Service into quite an efficient organization from an administrative standpoint. I always had a lot of respect for Chris.
- ERM: There were several other members of the Service that I think you didn't feel quite that same measure of respect for. What about Leon Kneipp?
- GLD: I never had much contact with Kneipp in the field. When I was in the Portland office, I did a good deal of work with the lands department, Washington office. He was in charge of lands in the field of negotiations on land exchanges. We were acquiring cutover lands and making land exchanges, and naturally Kneipp was the final person to pass on those things. He wasn't much of a fellow to get acquainted with, I found. I always felt he was quite a capable person and a pretty effective chief in charge of lands. He had very strong personal convictions, but he didn't have much respect for anyone else's opinions. I've seen him in action at national meetings when I thought he was very silly in his approach to things—very intolerant of anybody who didn't believe what he did.
- ERM: Kneipp was one of the members of what we might call the old Pinchovian Guard. Who were some of the others?

- GLD: Well, I knew Earle Clapp pretty well and I, of course, knew Nick Carter very well because I was working in his branch. The contrast between Nick and Kneipp was marked. Nick Carter was a very human individual and you just loved him and could argue with the man. But Kneipp was different—you took what he wanted and believed and that was it. You didn't argue with him.
- ERM: Now what do you suppose made the difference between these men? Why did you get this wide range of different philosophies?
- GLD: Kneipp became obsessed with the idea that the only salvation was one hundred percent government regulation. Naturally when I got into the industry side of the picture, I was on the side that was clashing with him and his thinking. He didn't help the Forest Service any in his position because he was so damned intolerant. He was a good man and had administrative ability, but he wasn't a good policy -maker or spokesman for the Forest Service. When a man makes you mad right at the start and thinks your side is always a hundred percent wrong, you don't try to cooperate very much.
- ERM: A lot of these men would say that back in the early days of the Forest Service, they were sympathetic toward the forest products industry, were looking forward to working cooperatively with them, and were involved in making a lot of plans. The whole spirit of their program was geared to establishing a cooperative relationship with industry, and then, they argue, all they got was a slap in the face.
- GLD: Oh, I don't think that was true if the man was of big enough caliber. Take men like Cap Winslow who did such a wonderful job in the early days of the Forest Products Laboratory at Madison, Wisconsin. Cap was the type of fellow that wanted to work things out cooperatively, and he got results. Colonel Greeley was another example and Nick Carter, but fellows like Kneipp were a different class. you just knew what their thinking was, and your answer was no when it might have been yes sometimes. It's much easier to cooperate with a man that's inclined to look at both sides of the picture and be reasonable, than some fellow who says, "I'm right and you're wrong, period."
- ERM: Well, you can look back, George, over more than fifty years of active experience in forestry.
- GLD: During the most interesting periods. I can go back roughly to 1910.
- ERM: And how do you characterize the present condition of forestry in comparison with those periods?
- GLD: We made tremendous strides, working with probably the most difficult conditions. I think the Forest Service has kept on a pretty level keel during most of the years. It's reflected, for instance, by the man who heads it up today—Ed Cliff. He's a very plain, ordinary type of fellow whom you can talk to and I think sees all sides of the question. The Forest Service is under terrific pressure not only from industry but from other- special interests. I think they've kept a pretty good balance through the years most of the time. They've had little flare-ups like during Silcox's regime. That was probably influenced by the Roosevelt philosophy. Silcox was picked for the job by Roosevelt.
- ERM: I'm not quite sure I understand what you mean by that, because in the last analysis, Roosevelt himself seemed to stand away from the regulation idea and not sustain it.
- GLD: Of course my feelings toward that regime were that they were not .completely sincere in the things they were doing. There was a lot of playing for the galleries.
- ERM: What about the net result of what they did?

- GLD: Well, progress was made. I don't know how much it was speeded up over what it would have been had we not gone through the Depression. We'd have probably had to have some changes.
- ERM: Do you think it could have been done as well by a continuation of the Hoover administration?
- GLD: It might have in time. The world moves, you know. But it takes jolts like that to give it impetus.
- ERM: You never had the confidence that Roosevelt was sincere, is that right?
- GLD: C. J. Buck (a very good friend of mine who's dead nov4 was not a New Dealer to start with but was regional forester at the time the New Deal came in. When word came down from Washington, D. C. that this was the rule of the day, he became a New Dealer, I think against his best principles. After the creation of Olympic National Park, Roosevelt came down from Canada to Lake Crescent on the north end of the peninsula for a conference between the National Park Service and C. J. Buck representing the Forest Service. Instead of listening for what he could find out from these two heads of departments, he started telling them what to do. The next day they had a triumphant parade around the Olympic Peninsula. Roosevelt was in a car ahead of C. J. Buck. They had brought in the WPA men from all over the area, and they were scattered along the road standing there with shovels as he went by—"hail to the chief." They would clap, and Roosevelt would always say, "We're doing this." It was the hypocrisy of the thing that got to me.

They went through an area where I was involved, the Polson Logging Company. There was some logging in government timber along the highway there, and we had been requested to leave some scenic strips. So I marked out about three or four hundred feet on either side of the road. But the wind blows like the devil in that country when it storms in the winter, and hemlock is shallow-rooted and most of them blew down and became a menace. People were petitioning to cut them down before they got killed. So Roosevelt went down through there, and of course, logged land looks bad before new growth comes in. Well, he said that the people who permitted this ought to be shot—and it was national forest timber!

- ERM: Now, George, I don't want to try to be the devil's advocate here, but couldn't you put that down to the naïveté of a man who didn't understand.
- GLD: And didn't want to understand. He thought he had the right answers to many things which he didn't know. He thought he knew all about forestry. The night he and C. J. and the Park Service man met up at Lake Crescent, Roosevelt suddenly turned to C. J. Buck and said, "Have you ever been in the Black Forest of Germany?" C. J. said, "No." Well, Roosevelt had been there at one time, and to him it was the height of good forestry, so he wrote off C. J. as an ignorant person. When he came back to Washington, D. C., he tried to get C. J. canned because he didn't know anything about the Black Forest. He was that type of fellow. I've been to Hyde Park, and the forestry there is laughable, just some small plantings. Nelson Brown had charge of it.
- ERM: That was quite along time ago, wasn't it? World War I time?
- GLD: No, about the time of the Depression, I think. He thought he was an expert on forestry because they planted a few trees at Hyde Park.
- ERM: You've been witness, of course, all through the years to the attempts that have been made to lock up various parts of the public domain, national forest lands, park lands, out in the West by the various conservation and preservation groups. What can you say in the way of some kind of a summary of what you've seen on this, and what you think motivates this?

GLD: There's an increased demand for recreation by the American public. They want to get away from the city, and it will continue. But I think there's got to be a reasonable approach to it. You can't lock up a lot of land just for somebody who has a pack on his back and is young enough and active enough and wants to go out for a few days a year and not see a tin can or any sign of civilization. The general public isn't that kind of recreationist; they can't be. They want a place they can go in the car with the kids that they can still enjoy even as they get older. I think the Forest Service has a very progressive program in setting up recreation areas of the type the average man can enjoy. I think industry has also contributed a lot. Simpson and other outfits have created recreation areas.

But I think there's a lot of hysteria. To some cutting a tree is a terrible thing, even though people need timber for national defense, support of industries, cheaper homes, and similar things. Take for instance, the situation in Olympic National Park. Originally there were three billion feet in the old Olympic National Monument. (The Forest Service had provided corridors going up the rivers so you could go through green timber to the boundaries of the Monument.) The Park Service made a study of what should be added to the Monument which would have been all right but Roosevelt entirely overruled the recommendations of the Park Service. He took a pencil, drew a hell of a big boundary, said, "that's what I want," and that's what they got. Once it's in a park, you can't get it out because every nature lover in the United States from Topeka, Kansas downward, who doesn't even know what a tree is, says that you're raping the woods. There are acres and acres that should be logged, that are needed by industries, in areas where tourists will never go or even see. It isn't healthy for the forest to let trees rot. Multiple use is the answer. Most people don't see anything in the glory of a young tree. But in Germany the thing the foresters are proud of is not the old rotten, defective trees that we think of as wonderful here. It's the thrifty, growing tree because that represents the future economy.

- ERM: After fifteen years in this business I'm more than ever convinced that a good part of this agitation for preservation comes out of a kind of mysticism. It's almost a religious feeling that people have toward growing things, and particularly large growing things. There's an unrealistic and irrational kind of approach to trees that you don't get in lots of other things.
- GLD: Did you ever drive up Highway 101 north of Eureka, California and see that park where they charge you admission to go in, above Klamath? Trees of Mystery—it's a private setup, very highly commercialized. It's just a little private forty acres. Some guy bought this piece of old timberland, decadent, full of down trees. One place of interest is a bunch of sprouts that have come up around an old stump. They look like organ pipes, and they call it the temple. As you come in a phonograph starts playing, "Trees" by Joyce Kilmer. I've seen grown people stand there with tears coming down their cheeks over that morbid thing.
- ERM: So what you're up against here is an unreasoning sentimentalism.
- GLD: Sentimentalism, that's right. "Woodsman, spare the tree."
- ERM: That's deeply ingrained in human beings. If they're unsophisticated about the problems and the needs of forestry and forest land management, they can be easily persuaded.
- GLD: They don't even understand the forestry problems. I think I may have told you this story, which I think illustrates the thinking of a lot of people. One night I had a call from a fellow down in the pulp mill, who said his father was out here from Iowa and he'd like to visit a logging camp. I said I was going up in the morning and I'd pick him up around 5:30. He was a nice old fellow. In the first ten miles out of Shelton on the way to Grisdale you go through early cuttings, probably fifty years old. The trees are around twenty inches in diameter, and to him that looked like giant trees. He couldn't see any stumps, and he didn't say much. But as we got further west into more recent cuttings, he began to comment on the stumps he could see sticking in among the young trees. Finally we got to a place where there was a more recent cutting and there were more

stumps than there were young trees, and he started to cry what a terrible devastation this was. Well, I stood it was long as I could and I said, "Your son tells me you're from Iowa. That's wonderful country, isn't it? I've been through there on trains many times. What do you grow there, corn? How much of a crop of corn do you grow?" "Oh," he said, "about sixty bushels to an acre. That's the best corn-growing land in the United States." "Well," I said, "I'm curious. We're growing trees. We're farmers, too. What do you do with the land after you cut the corn?" "Why, he said, "we let it lay fallow until spring when we plant it." I said, "You don't use the land at all the remainder of the year?" I knew darn well they couldn't use it. "No," he said, "we don't use it." "Well," I said, "I thought you fellows were pretty smart farmers, but I think we're better than you are because we have a law in the state of Washington that if we don't get another crop within seven years, we have to plant it. So actually on our land we're running on a 120 year rotation or 100-year rotation as against the 100 days rotation of your corn. Our land is idle only a very small proportion of the period, while yours is probably not growing anything for two-thirds of the normal year. We're growing 60,000 feet to the acre corresponding to your sixty bushels to the acre. What do you do with your product?" He said, "We sell it." I said, "Well, we sell our product, and a lot of it goes back to your country, and you build churches and fences and barns and farmhouses and what have you. Most of your product that we get out here comes by way of Peoria in the bottle. Now, I wonder which does the most good: building some churches in Iowa or selling some whiskey to drunken loggers. Another thing. If I was back there in the fall after you'd harvested your corn and I took a drive through the stubble fields, would you apologize for all the stubble? 'No,' you'd say, 'by God we got sixty bushels to the acre.' What you've been seeing, these stumps, they're nothing but the stubble of these trees, and yet you think it's terrible to have stumps here, but it's wonderful to have stubble back there. The main thing is we're both trying to do a good job managing the land. Now, we can't grow corn but we can grow trees. We need trees, and you need them, and we need corn. Just a matter of viewpoint." He said, "I never thought of it that way. "

ERM: That's just it. People haven't really thought of it that way.

GLD: A bunch of women representing the conservation department of the women's clubs in Washington came over to Shelton. We had a little luncheon for them, and I brought out all our maps and showed them what we were doing, where they were going, what they would see in the second growth. We had a lookout up there. You could see 250,000 acres of a beautiful second growth. And on the way you went through an old stand of timber. We stopped alongside the road and I said, "What do you think of these trees?" "Oh, they're gorgeous." I said, "Do realize that these trees are of little value? They're rotten, they shouldn't be here, and they're taking up valuable space. A young thrifty tree should be growing in their place." I started to bore with my increment borer to show them the rot. I said, "This is what you get when you let trees stagnate. These should have been cut before Columbus discovered America, but the reason was there was nobody here, there was no market for it. All this timber should have been cut probably 200 years ago." Then we stopped along the road where there were some young thrifty trees. You could see that these trees got more light. I said, "This is what you can do when you practice forestry and thin trees out. These are trees of the future. A German forester or a Japanese forester would rave over this wonderful second growth. That's what they're trying to get. He would wonder why we let these other trees rot and disappear." Well, they were quite interested. People need to be told the story.

ERM: How well do you think the story is getting told today?

GLD: I think guite well, but it's a story that you can't tell once and stop.

ERM: You've got a very outstanding spokesman in David James.

GLD: David has done a good job, yes. But even in an organization as forestry-minded as Simpson, there's need to tell the story, to explain it again and again in the field.

INTERVIEW IV

George L. Drake San Diego, California January 19, 1968

- Elwood R. Maunder (ERM): George, will you spin out some of the experiences you had in your early days with the Simpson Logging Company, in particular, the problems you had with your labor force. How did you deal with your men in the woods, and what do you think the history of that relationship has been?
- George L. Drake (GLD): Well, I came with the company in 1930. There was very little labor agitation anywhere in the Northwest. They had gone through the period during World War I when the IWW was quite active, but in the meanwhile things had quieted down, and it wasn't until around 1937 that the first labor activity took place again. At that time, the federal government was quite active in promoting labor organizations. The boys in the woods took advantage of it and we went through several years of quite serious conditions. This was intensified by the fact that both the AF of L and the CIO were competing against each other for members and, naturally, promising the sky to each group they were working on. It wasn't until they kind of got together and set up one organization that things became more or less normal.
- ERM: The organization that finally got established was CIO rather than AF of L?
- GLD: No, it's a combination. It's the IWA (International Woodworkers of America, the woodworker's organization, but affiliated with the CIO and AF of L together. At Simpson, we had the AF of L down at McCleary, and the CIO in Shelton, which was a little bit of a problem. In the early days, there was a bunch of radicals—probably some communists—trying to provide a leadership for our own men. It was a year or so before that straightened out and they got rid of them and got better men for themselves. We had some really hectic sessions. At Shelton, Chris Kreienbaum and I did our own negotiating. We negotiated with the union members for almost a year on a contract, but never could get one together because they were striving for some very unrealistic things, we thought.
- ERM: Such as what? What kind of things were they trying to get in the contract?
- GLD: We insisted that there be a provision that in discussing seniority, competency had to come into the picture, and they wanted straight seniority, regardless. We had two bad strikes that lasted about three months; one was over the right of the company to designate who was going to be their foreman, and the other was over the matter of seniority. It cost the men a lot of money, but they finally came around and accepted our position, and it had to come because you can't run an organization unless the management has the right to designate who's going to be in charge of things. But out of both those strikes, we never had any bitterness; we were friends the whole time.
- ERM: Was there any real difference between your negotiations with the labor force that worked in the mills of the company, and those that worked in the woods?
- GLD: No, the union membership was from both the mills and the woods. The difference then, in which I think we did a good job for the time at least, was that the negotiations were not by so-called professionals on the company payroll, but by men like Chris and myself who were very active in the company. We took lots of time. One of the interesting things was that we insisted from the start that there be a record kept of all of the meetings. We hired a court stenographer to come in



George Drake, forest consultant from Tacoma, Washington, moderates a panel on, "What's New in Logging" at the 47th Session of the Pacific Logging Congress, San Francisco, November 14, 1956. Pictured left to right: Charles E. Sikes, Ginderson Brothers Engineering, Eugene, Oregon; Warren Brown, Brown's Tie & Lumber Company, McCall, Idaho; Clifford M. Bryden, Roseburg Lumber Company, Roseburg, Oregon; Drake; and Henry M. Sheppard, American Pulpwood Association, Wausau, Wisconsin.



Pictured are men who have served in the leadership of Simpson Timber Company. Left to right: W. G. Reed, T. F. Gleed, C. H. Kreienbaum, C. H. Bacon, Jr., and George L. Drake who retired as vice president in 1954.

and record the meetings and then saw to it that the union got a copy of the proceedings as well as the company, and I think it kept both of us on a pretty level keel.

ERM: You always had that transcript to go back to.

GLD: Yes, and they had a copy to take back to their membership. They couldn't say, well we said this and we did this; by God, if there was any question, let the membership listen to it. It was very helpful.

ERM: You mean a tape recording?

GLD: No, they took it in shorthand with a machine, which we paid for.

ERM: There had been a period during the twenties when the old 4L had continued to exist but had gradually kind of died off in influence. Just before the Depression struck, when you began to see the writing on the wall—that there would be a stronger union in the future—how did you deal with that?

GLD: Well, it came very suddenly with the passage of some of the laws that were put in effect at that time, during the Depression. The 4L died from lack of momentum and interest, I guess. It started during the war as a counterbalance to the IWW, and I belonged to it at one time.

ERM: You belonged to the 4L?

GLD: When I was in the camp over in eastern Oregon. It was a war measure to start with, and had some very good leadership. At times it was very effective.

ERM: When you began to draw up a contract at the time of the Wagner Act, did you do this strictly within the confines of your own company, or were there any industry-wide negotiations²⁵?

GLD: Oh, I was on the industry committee for several years. We were meeting almost continuously with the union representing Washington and Oregon and we had some very excellent leadership in John Tennant of the Long-Bell Lumber Company, Longview, Washington, Al Roth and some others—Judd Greenman, president of Oregon American Lumber Company, and Jack Donovan. We had an industry group [Lumbermen's Industrial Relations Committee, Inc.] that met with the union and did a lot of constructive work. J. B. Fitzgerald represented the group. It was a very interesting experience because the union had a lot of high-powered agitators; they didn't have the best leadership. But John Tennant was a very masterful gentleman. He had been a member of the United Mineworkers in his earlier days in the coal mines back in Illinois.

ERM: Oh, a mineworkers' union?

GLD: Yes, John was a miner to start with. When things would get tense, John would smile and say, "Now, boys, back in 1891"—or something like that—"I was one of you boys. I know just how you feel." John went through this over and over. It was very interesting.

ERM: Chris Kreienbaum seemed to recall that he was a member of the carpenters' union.

GLD: No, he wasn't a carpenter. He was a miner; because Long-Bell, I think had some mining interests down in Illinois, and that's where he came from.

²⁵ National Labor Relations Act of 5 July 1935 (Wagner-Connery Act), 49 Stat. 449.

ERM: Well, at the point when the Depression struck there was some real question in your minds as to whether or not you could keep the plant going.

GLD: I think that was in everybody's minds.

ERM: Mark Reed decided to move in the direction of keeping the show going even though it wasn't a very profitable thing to do.

GLD: Mark Reed was a man with a lot of dedication to the community in which he lived and to the men that worked for him. We had probably one of the best records anywhere in the Northwest of operating during the Depression. Shelton lost less time than anybody else. We took cuts in wages, all of us right down the line, but we kept going.

ERM: What did this do in terms of morale building among the labor force?

GLD: I think our men appreciated what we were trying to do, trying to keep going.

ERM: What did you do to help them besides keeping the mill open?

GLD: When things finally got so tight that we had to shut down for several months at a time, and there was no way for men to get any help from any public agency, Simpson saw to it that none of its employees suffered.

ERM: How did they do this—extend credit of some kind?

GLD: I was elected to be Santa Claus. Every Saturday morning I spent all my time listening to problems that these different men had. A lot of them had been buying cars on time, and one of the things that we tried to do was to save them their cars. In addition we helped pay medical bills. And then we made arrangements with the local store where with the approval of Lumbermen's Mercantile Company and the backing of the Simpson company, they got credit—so much for a married man, so much for each child, so much for a single man because a single man could get by by renting a shack down on the bay some where, if we gave him enough for groceries. Then I found out that it was necessary to be the "Big White Father" and check over what they were spending for groceries. I used to get the grocery bills and go over them. If I found that John Smith was buying too much yeast to make beer or buying too many cigarettes, I told him that wasn't in the picture, that we were giving him this credit, but we expected that they were going to pay for it and the less they borrowed, the less they'd have to pay back.

It was very gratifying that all except a small amount of these loans were paid back in good faith. The way the thing terminated was quite interesting. We didn't get into union negotiations until the Depression was starting to ease off. And in one of their first talks, these agitators (I'd call them) told the men that Simpson was just trying to make goats out of them. Our helping them out during the time of trouble was just something to kid them along. So next Saturday when some of these boys came up to me with their tales, I said, "Oh, I'm awfully sorry fellows, but I understand you've been told down at union hall that we're just doing this to make slaves out of you and that's the last thing we want, so I'm awfully sorry, we can't do it today. You go down and talk to this union organizer and let him help you out. But, "I said, "if you get in any jams or you have a death in the family or any problems like that, come up and see me and I'll see what I can do"—which we did afterwards, but we didn't advance any more credit to them. Very interesting thing.

ERM: You said a little earlier that you thought there were a number of communists in all this. What evidence did you have that sustained this?

- GLD: Well, we knew what their record was, and some of them were quite outspoken. They weren't from our group, they were from Grays Harbor and other places. These agitators would come in with aloud voice and just dominate these meetings. Our men didn't know how to take care of themselves.
- ERM: And they didn't always remember the benefits that had been made possible through the company.
- GLD: Well, they'd listen to these birds say that this was just to make wage slaves of them when they knew better. We didn't let that cloud our thinking at all. We treated them just like we always treated them. If a man was a good man, we helped him along. When it was all over with one of the first things we did was make the newly elected president of the union a foreman.
- ERM: Did you ever have any cases that you can remember of men who were troublemakers for you in either the woods or the mill that eventually came around to being good employees of the company?
- GLD: Well, we never had any real radicals—the sabotage type. We had fellows that got up and shot off their mouth when they shouldn't have, but we tried not to let that cloud up our thinking.
- ERM: Would you negotiate a new contract with these people every year?
- GLD: No. If we were working on a contract, we tried to do the things that we said we could do if we had the contract, but we didn't sign it until it went through industry negotiations.
- ERM: And that applied to all the mills that were involved.
- GLD: The mills, the woods and everything.
- ERM: Sometime earlier you had an experience with Henry Solon Graves when he was chief forester and you were still in the Forest Service.
- GLD: Around 1915 when Graves was chief forester, I happened to be up in Juneau, Alaska with my boat, surveying some homesteads up in the Mendenhall Glacier country. A fellow came up to where I was staying and said that he had seen by the paper in Juneau that my boss was in town that night, which I didn't know anything about; we didn't have any radio in those days. He asked if I would like to go in and meet him, and I said yes, I would. So he said, "Well, I'm going in town tonight again, why don't you come in?" So I looked up Graves in the hotel, and he was very much interested to meet me. I was the only man he'd met in the Forest Service in Juneau because everybody was out. So he went down to my boat, and spent the evening with me. I was just a youngster, and it gave me guite a thrill to have the chief forester come down and be with this punk kid. It was the first time I'd met Graves and I was, of course, fascinated by his appearance. He had flashing black eyes; they just sparkled when he talked. And during the course of the evening, he told me a story which I found out afterwards was his favorite story, a very clever one which he used with great effectiveness when he was talking to different groups like Chambers of Commerce. I've used it myself at times. It's an excellent story about the country church up in the state of Maine that was looking for a new minister so ministers were coming up there on trial. One particular Sunday, the candidate had been out at a farming community in Kansas. When he looked over the audience and saw they were all farming people, he thought this was the time to give them the agricultural prayer and the agricultural sermon, which he did, and he prayed long and fervently for rain. On his way home with the deacon for dinner he was curious as to how the sermon had gone over and he said, "I notice that most of you people are farmers. Did you like my agricultural prayer and my agricultural sermon?" The old fellow said, "T'aint rain we need around here, it's manure."

Graves was a very interesting character. Years afterwards I ran across a fellow running a logging camp up in central Washington who had the same sparkling eyes that Henry Graves had. Turned out, he was Graves's cousin!

ERM: Did you ever have any other occasion to have personal contact with Graves?

GLD: No, I don't think so. By the time I got to Washington, Graves was no longer the chief forester.

ERM: Did you know him during the war, then, at all?

GLD: No, I didn't get in. I was supposed to go overseas with the Tenth Engineers and didn't make it physically. Colonel Graves was with the Tenth Engineers, a big regiment. The Twentieth absorbed the Tenth and Colonel Greeley, Lieutenant Colonel, actually did most of the management of the regiment.

ERM: When did you first come into contact with Greeley?

GLD: Well, I think I got to know him when he was still in the Forest Service, right after the war. When he went overseas in the war, I think the Forest Service promised him an executive position in Washington, D. C. when he came back. He had been in the Missoula office before that, in charge of forest management. I didn't get to know him very well until after I got to Washington, after I came back to Portland. I came to Portland in 1919 and the Colonel would have been coming back just about then. Of course, I got to know him very intimately after he came to the West Coast.

ERM: Is that when you really became acquainted?

GLD: He and I worked very closely together in the NRA days in the development of Article X.

ERM: On the subject of NRA, why do you suppose the Lumber Code Authority's operation broke down as it did, particularly in your area of the West Coast Lumbermen's Association? Your company finally took the initiative and declared, I think sometime in 1934, wasn't it, that you would not abide by the Code as far as price is concerned?

GLD: Well, I don't know. I didn't have anything to do with the sales organization but there were problems because the thing was not workable. Of course when the whole NRA broke down over the Schecter Poultry case back in New Jersey, it was a good chance to get out of it. There were unworkable things in it and certain people apparently were not playing the game a hundred percent.

ERM: Well as time went on, Simpson got more and more toward the end of the supply of its own timber, and in the forties began to realize that they would have to make some other accommodation if they were going to continue to operate for any length of time. And in 1941, I believe it was, you bought the McCleary land?

GLD: When I went with the company, one of the things Mr. Reed said that he hoped we could work out was some kind of a long-range program whereby the stability of Mason County could be established and to that end, the company had already made a great step; not with any definite plan in mind, but just because I think their thinking was pretty sound. Mr. Reed had great faith in the land and the company behind him. They had retained all of their cutover lands and were doing an increasingly better job in fire protection, whereas most of the companies, even the very largest ones, had let their cutover lands go for taxes. Simpson had a nucleus of nice young timber.

ERM: Had this fact made any impression on the people in the Forest Service of the area?

GLD: I don't know as they recognized it, but it was there if they wanted to see it. During the Depression we started studying our lands—the first real step toward long-range management. I was scurrying around trying to find jobs to keep some of my key men working and we didn't have any information at all on the character of the growth on these cutover lands. So I 'put some of our men out in the field to make a rough map to start with, of condition, location, amount of timber, and that gave us a picture of what age classes we had. We improved that continually until we got very good records.

ERM: When did you start that survey?

GLD: That was probably during 1932.

ERM: Was it at the same time that the national forest survey was being made by the Forest Service?

GLD: That started about 1930, because I attended the initial meeting of the forest survey which was held up in Madison, Wisconsin and we were discussing techniques and what we were going to do. That was, I recall, the first discussion of a national survey.

ERM: But did the survey of your own lands stem in part from the knowledge that the Forest Service was doing the same kind of job?

GLD: Not necessarily. As a trained forester, I was used to working with forest maps; I realized we had to have a survey. When I came with the company, I felt the current maps were not adequate for our intended uses. In fact, they were using the ordinary Metsker's maps, which you can buy in any stationery store, showing the land ownership by sections. We didn't even know where we were logging, exactly, so one of the first things I did was to get our engineering department to prepare decent maps. We didn't have one map that showed all the ownership on it; just~little township maps. As we got our engineering department geared up to do better work, it was possible to start making these maps. For example, in the management of second growth you need detailed information on age classes, site condition, and species. As we developed skidder yarding in rough country we found that we needed dependable topo graphic maps to check proper deflection. It was a great source of satisfaction to see the use by veteran loggers like Will Grisdale and Clay Berry of these maps.

ERM: Roughly speaking, how much of Simpson's land was still in old growth when you came with the company in 1930?

GLD: We had a lot of old-growth timber yet. We were logging then probably better than 100 million a year, and before then we had logged as high as 200 million during the twenties. We still had, probably, fifteen, twenty years ahead of us if we continued at the same pace. But we started buying government timber in 1930, I think.

ERM: Were you involved in that?

GLD: They bought the timber just before I came in to the company.

ERM: Were you involved in the sale for the Forest Service?

GLD: No. I'd never done any work on the Simpson lands prior to going with them. Another man from the Portland office had done all the negotiations and timber sales with Simpson.

ERM: How did you happen to go to Simpson?

GLD: Well, by an act of God, I guess you'd call it. Mr. Reed was bringing up his oldest son, Sol, to handle the woods operations.

ERM: Is he the boy who was shot by a deranged logger?

GLD: That's right. I had been up in eastern Washington on a forest fire and didn't get back to Portland 'til around the first of September. When I came back into the office, the man I worked under, Mr. Ames, told me that Mr. Reed had been down there looking for someone to come into the organization to take over the work that he had intended his son to do. Nobody knew me up there; I'd never been on the Simpson operation, but Mr. Ames recommended me. I went up and talked to Mr. Reed and that was how it was—I went with the company.

ERM: What sort of a person was Mark Reed? How would you characterize him?

GLD: I think if there's any one man who had an influence on my thinking in careers, it was Mr. Reed. He was a marvelous man, very able, with tremendous grasp of things; a magnetic personality that could get things done. During his active years he was probably the biggest influence the state of Washington ever had.

ERM: What were some of his outstanding characteristics as you remember? How would you describe him as an individual?

GLD: He was a large man, very forceful, had a very soft, pleasant voice when he was in that kind of a mood, but when something went against his grain, the sky shook and there was thunder and lightning—you knew how he felt. But he was a very fait man and very kindly, very much interested in his employees especially, and his community. Took a terrific pride in it. Took great pride in the state of Washington. He was speaker of the house for many years there.

ERM: Did this enter into your decision at all in deciding to go with the company?

GLD: Well, I'd never given any thought about going into private industry, but when I talked to Mr. Reed and sensed some of the possibilities that might be ahead, I was very much interested, frankly.

ERM: In other words, it was not just the opportunities of a new job, but the personality of the man.

GLD: It gave me confidence. Here was a man I'd like to work with and the job that I was offered was such an unusual one. The title was Assistant to the President; well that would impress any young punk, wouldn't it? One of the interesting things was that Mr. Reed had an office in his home, and every Sunday night I'd go there after dinner, and he would talk over with me what my plans were for the week. That's about all the instructions I had. He gave me quite a lot of rope which I think was his approach—you are responsible and you pay the consequences. Fortunately, I got along fine but I always had the guidance of going over there Sunday night and talking things over very frankly with him.

ERM: His home was in Tacoma?

GLD: He was still in Shelton. He was a delight to work for, and I was very fortunate to have that opportunity. I worked for him three years before he died.

ERM: He only lived three more years?

GLD: Yes, he was one of the tragedies of the NRA.

ERM: How do you mean?

GLD: He was one of the representatives of industry in forming NRA. They had a meeting in Chicago and it developed afterwards that a hotel bus boy had amoebic dysentery. Mr. Reed came down

with it when he came home. He went to his local doctor, who didn't know anything about it because it was an entirely foreign disease in those days. Then he went back to Washington, D. C. to another meeting, and it was still getting worse. The tragedy was that he didn't go down to johns Hopkins. They might have diagnosed it because they knew something about tropical diseases. But he came back home and thought he had cancer and was operated on. That was the worst thing he could have done. After they found out what the trouble was, the director of health in Chicago sent wires to everybody who was at this meeting, warning against having any operations because if you were weakened a bit, the thing just took you.

- ERM: Were there any other cases?
- GLD: There were eleven men, prominent people in industry, who died from that.
- ERM: The lumber industry? I didn't know that that had happened.
- GLD: Yes. That was in 1933, It was a terrible tragedy.
- ERM: What a shame. Now, was Chris Kreienbaum working for the company at that time?
- GLD: Oh, yes. He'd come there five years earlier when they built the mill, about 1925 Chris was running the mill and the sales department. We just worked together. It was my job to keep the logs in front of the mill.
- ERM: Then you and Chris were, in a sense, kind of teamed up together; he running the mills and you running the woods, is that right?
- GLD: Well, our offices were next door and we naturally talked things over. I didn't have anything to say and didn't try to have anything to say about the mills; that was his job. But we had to work together because you've got to know what you're getting in front of the mill so you can plan on what you're going to be able to saw.
- ERM: When was the decision made to go into cutting hemlock in a much bigger way, to make more of that resource and reduce the total cut on your lands?
- GLD: That was prior to my time. Simpson started originally as an independent logger selling logs to mills all over Puget Sound and when the Northern Pacific came into Shelton, about 1925, and Rainier built their pulp mill there, Simpson built what we called mill #1, which was a hemlock mill, and also a shingle mill to cut cedar. The idea was to bring in the hemlock that had been a problem child to sell and make lumber out of it and send the refuse to the pulp mill, which was a natural thing.
- ERM: You got much greater utilization, then.
- GLD: Oh, yes, and we had a market, you see, because the pulp mill could use all of the waste from the mill.
- ERM: And this situation was still in effect when you came?
- GLD: Yes, that was already there. The cedar mill had kind of washed out. When they built the cedar mill, they were always talking about the wonderful stand of cedar that was in the back forty, but they never got there. Then they were going to cut squares (Japanese squares) and send them to Japan, but that didn't work out; the shingle business was always a feast or a famine.
- ERM: Didn't they cut some rather poor Douglas-fir Japanese squares and make something out of that?

GLD: Well, there was always some market in Japan for squares because that's lumber they can remanufacture. They bought a lot of stuff out of southern Oregon, and the Port Orford cedar went to Japan.

ERM: At what point would you say you began to think in terms of the possibilities of a sustained-yield unit arrangement with the Forest Service?

GLD: We were thinking pretty hazily for a lot of the period about what we could do to effect a longer term operation. When President Hoover set up a commission on forestry (which Dave Mason was a member of) to study the possibilities of working out some kind of agreements between the federal government and private industry for the management of their lands, that sounded like one possibility for us. We had an excellent potential for that because we had this large acreage of second-growth land which could go into any kind of a picture. And we still had quite a lot of old growth to go with it. We started to think about it and when it looked feasible, I think we approached the Forest Service, and they sent up Ed Hanzlik from the Olympic National Forest to make a study of it.

ERM: About when would the Hanzlik study have been made?

GLD: Oh, about 1940, and then it was followed up by a later report, and it was quite apparent that we needed to have more second-growth lands to round out the picture.

ERM: And that's when Simpson bought the McCleary land?

GLD: Even before we acquired the McCleary property, I had had my men go out and make a study of all the county lands available.

ERM: That had gone back to the counties for taxes?

GLD: Yes, and which they were trying desperately to sell. We went to the county and asked them if they'd be interested in selling us a blaock { sic}. We had information which had been getting better on all these lands and we picked out 20,000 acres of county land which they were happy to sell.

They had a very able man who was county commissioner, Bob Krenckman, and Bob said, "Now this is quite an order. This land has been offered for sale for years; nobody wants it. But if we sell a big bunch there'll probably be some people criticizing. Would you have any objection to having a public hearing before we make the decision to sell?" So we said, fine, we wouldn't want to acquire it if the people weren't in favor of it, and we had a meeting. It was fascinating to me because all the screwballs in the county—and you get some in every county—got up and had a protest. One fellow said, "I know why you want to get this. I've seen your men out back of my barn looking at some stuff there. There's oil on these lands; you want to get it because of the oil on it." So, Kreienbaum said, "Well, that would be wonderful. We'd like to see oil discovered because we've got a little bit of land, but we're very agreeable to leaving all the mineral rights with the county." That fellow's argument was flat. Nobody's ever found any oil yet. They put the land up and we acquired that 20,000 acres which rounded out our age classes. And then we knew the McCleary property was to be sold.

ERM: That gave you 6,000 more.

GLD: Well, it wasn't so much that we got the acreage. They had a sawmill in Shelton, that was built the same time that the railroad came in, in which they cut logs to make shop lumber to go to their door factory in McCleary. Well, that was right adjacent to our property; in fact, the power plant was owned jointly by McCleary and Simpson. So if we had that mill, that would give us more milling capacity and a mill capable of cutting large logs. When we bought the McCleary

property, we got the mill in Shelton as well as the mill in McCleary. Besides, there were 4,000 acres, I think, that McCleary still owned around McCleary; we got that, too.

ERM: This moved you farther to the west, too, and gave you more of a justified claim to some of that Forest Service timber that was up in the Olympic National Forest.

GLD: I think it made our position a little more tangible because a lot of our ownership of Simpson, from the very start, was in Grays Harbor County. Everything west of the Satsop River is in Grays Harbor County. We'd been logging there for years and years and opened a lot of land in Grays Harbor County, but we did not have any manufacturing facilities there; they were all in Mason County. When we acquired the McCleary property, we became a substantial employer.

ERM: And a taxpayer.

GLD: A taxpayer more than we had been in the past, and the McCleary property was the only large, steady payroll in eastern Grays Harbor County. All the other plants had gone, so that made us just as much a Grays Harbor organization as a Mason County organization, at least county-wise.

ERM: This obviously strengthened your hand to make a bid for a program under the sustained-yield act?²⁶

GLD: It made a more logical picture. The big thing about the sustained-yield program was that while it benefitted us, it benefitted the people all around. If the national forest timber allowable cut had been dependent entirely upon the government timber in the unit, they could only sell a certain amount per year. But if you added second-growth lands, then you could justify an increase in cut on the old growth, which was in need of being cut, because the second growth would take up the slack and there wouldn't be any hiatus of timber for the operation. We had the perfect picture of a balance of old growth (our old growth and government old growth) and all this vast acreage of second growth. In the long run, when the old growth is gone, the cut will probably go up on the second-growth lands because the old-growth lands aren't growing any more timber; they're stagnated, going back, while your young timber is growing just like a field of mature wheat. You're not growing anything on that, it's just sitting out there waiting to be cut; it's your young wheat land that's producing the crops.

ERM: Had you been advised at all by Dave Mason relative to sustained yield? He was such an ardent spokesman for the idea.

GLD: The company knew Dave. He was quite vocal and he'd written quite a lot too.

ERM: Had he been employed as a consultant?

GLD: I don't think he ever was as far as I know.

ERM: You never employed him?

GLD: We worked with him, but actually, no.

ERM: In other words, he had nothing whatever to do with getting the sustained-yield agreement with the government.

GLD: No, he didn't. We worked that out ourselves, definitely.

²⁶ Sustained-Yield Forest Management Act of 29 March 1944, 58 Stat. 132.

George Drake explaining Simpson Timber Company's forestry program to officials representing Del Norte County and town of Klamath, California, 1950. He used the mosaic map in the background as an example of Shelton timber lands activity in western Washington. It showed Simpson's efforts at sustained-yield forestry in the state and demonstrated the company's proposed efforts to do the same type of forestry on Simpson redwood lands in California. Photograph courtesy of C. H. Kreienbaum.





This photograph was taken at Camp Grisdale, Simpson Timber Company, Shelton, Washington, 1950. With Drake is Stewart Holbrook, author of <u>Holy Old Mackinaw</u>, the story of the American lumberjack. A rather amusing sidelight—after World War I Dave brought into his organization a very bright fellow that had been in the Forest Service, Carl Stevens, who graduated from Yale the same year that I graduated from Penn State. I had word that the government had passed the Agricultural Appropriation Bill; ²⁷ I got a telegram saying to report to Portland because we had to wait until they had the money to hire us. I picked up the next morning's paper, the Sunday Boston *Globe*, and there was an article with Carl Stevens's picture in it saying this brilliant young boy from up in Maine was going to work for the Forest Service; probably the article was already in the office of the paper awaiting word to go on it. That was my first introduction to Carl Stevens. When he came to work for Dave, I was still working in Portland Forest Service and I'd meet this fellow, and every meeting I'd have to re-meet him. because I was just small fish working for the Forest Service and he was in Dave Mason's office. Now, when I went to work for Simpson and he thought there might be prospects of work for Simpson, boy, he just knocked people over to try to get to shake my hand! I never had such a friend as I had in Carl Stevens after he thought I had a job that might benefit him. He was a bright fellow, but very egotistical. A lot of us get to be, I guess.

ERM: How do you see the Shelton sustained-yield unit now more than twenty years after being set up?

GLD: Well, I think it's been a very stabilizing influence in that whole community; there's no question about that. It's just too bad they couldn't work out other places.

ERM: Why do you suppose it wasn't worked out in other places?

GLD: Very frankly, because a lot of them didn't have the necessary components. You have to have a company with an interest and with an ownership of second growth and old growth. The other thing is I don't think they had prepared themselves for it because you give up certain things. You can't do as you please; you sort of follow the program and that's it.

ERM: And there are always screams from others who say it's regulation.

GLD: Oh, there's bound to be that, but the people who scream the loudest have nothing to offer or haven't made any effort to put their operations on a long-range basis.

ERM: Or who have no concern about the stability of their operations.

GLD: Well, they don't want to be involved in things; they want to be running their own damn business without anybody having any interest in it. You've got to admit, if you're in partnership with the government, they're going to have some say in how you run your operation. If I do put a feather in our cap, we did a good job in public relations with our own people and within the community. They knew what the problem was. I think that's been one of the sad things in lots of places. People in the community who are involved in the management of forest lands, as well as other lands, don't know the whole story; they haven't been advised, kept posted. We found whenever we kept our people informed, they were responsive and sympathetic to what we were trying to do.

ERM: Do you feel that the promise of the Shelton sustained-yield unit, which everyone held forth when it was finally signed in 1946, has indeed been realized?

GLD: It has definitely by the people in the community.

_

²⁷ See footnote 20, page 49.

- ERM: How about the company? Has it realized all that it hoped?
- GLD: I hope so. I think relations have been quite good. There've been problems of the cost of timber and things like that, which are bound to come up, but by and large, I think it's been a very healthy thing; it's been logical.
- ERM: On the matter of the cost of the timber, under the terms of the agreement, the timber was sold to Simpson at appraised value and not on the open bidding basis.
- GLD: Yes, but I think the appraised value has been kept plenty high. If you go through the records (we have made some studies), and take all things into consideration, Simpson has paid as high as the average price has been anywhere in the Northwest. There have been no special concessions. Of course, there's no cheap stumpage anywhere anymore. In fact it's too high, probably to make it attractive.
- ERM: In these twenty-one years since the contract was written, you're one-fifth of the way through the hundred-year period of the agreement. In that first twenty years, the heaviest part of the cut has been made.
- GLD: No, the cut I think is probably about forty percent of the timber in the national forest.
- ERM: So then you've got about half of it, at least, left?
- GLD: Yes.
- ERM: That could conceivably last for another twenty years.
- GLD: Well, the anticipation was that the old-growth timber would last forty or fifty years. It would have to before the second-growth was mature. We're cutting some of the, second-growth as thinnings now, but thinning is good forestry in order to improve the growth of the remaining timber. Just like thinning a patch of onions; you pull out the little onions to make the big ones grow.
- ERM: So as time goes on, you'll be moving back more and more into the second-growth on your own land to sustain the major part of your need.
- GLD: The thought is when the old-growth timber is entirely gone, we'll entirely depend on what is now second growth but in the meanwhile, we're getting some thinnings off the second growth. We've had very heavy road investment through these years to open up the timber, and we patch log so we've got these intervening pieces to come back to. So there'll be old-growth timber coming in for the next twenty years, anyway.
- ERM: If you could go back to the beginning, are there any substantial changes that you would want to see made in a contract of that kind, that you see as being desirable now in the light of experience?
- GLD: I haven't been in contact for so many years, that I couldn't pass on that. I have always felt that it was a very practical contract for which Dahl J. Kirkpatrick should get a lot of the credit. He was the man from the Forest Service who drew it up; naturally I worked with him on quite a lot of phases. The thing that I always marveled at was that after the contract was written and went back to the office of the solicitor in Washington, D. C., there were very few changes ever made in it and generally they're pretty picayunish on the "whereases" and the "whereofs" and so forth. That contract was written in language that the average layman could read, and I don't know that any serious interpretations ever came up.

ERM: There was, at one time, some threat that there might be repeal of the sustained yield act by the Congress, wasn't there?

GLD: There was a movement that way at one time, a threat.

ERM: Where did that come from?

GLD: I can't recall now. I think it was inspired by petty jealousies and things like that which are bound to occur, but a fine response came from the people of our own community who were very strong for the contract. The people who were most violent against the whole agreement when it started, had never on their own part displayed any interest in long-term forest management. They were the mills that didn't want to own any land, wanted you to carry all the burden of the timber. If times get tough, let the stumpage take the load. You cut your stumpage, sell the timber cheap—in other words, give your stumpage away.

ERM: Well, you believe, then, that time has sustained the merits of the case.

GLD: I'd say the logic of it, yes.

ERM: Do you think the logic <u>still</u> hold{s} true in today's situation? Do you think that it makes sense to have the sustained-yield units?

GLD: It does in areas where you make it a practical setup.

ERM: Aren't there considerable areas that might fall within that category? I'm thinking now, for example, of a situation such as Hines has in eastern Oregon. Would it make sense to have a sustained yield unit there?

GLD: There's no object there. The timber's practically all owned by the Forest Service. Hines doesn't own much.

ERM: Hines doesn't own any.

GLD: They bought a relatively minor amount of scattered timber that was there when they started in, but lands that Hines owned outside of the lands they might have bought from the old East Oregon Land Company didn't amount to anything.

ERM: What about an outfit like Brooks-Scanlon? They own considerable timber of their own.

GLD: Brooks-Scanlon is now with their second-growth timber, their cutover land. They didn't hold their lands; they traded them in to the Forest Service for the stumpage.

ERM: But they still own quite a bit of timber.

GLD: They're cutting mostly Forest Service timber now.

ERM: What about some of the other ownerships; what about Weyerhaeuser?

GLD: Well, Weyerhaeuser is a case by itself because Weyerhaeuser owns so much themselves, they didn't want it.

ERM: They don't need it. There's neither short nor long-term advantage to them.

GLD: I've looked over some properties down in California where they considered a setup like this, but they weren't practical. They didn't have enough of their own timber to put in the picture. They wanted the government to put everything up. Under the same act that covered the Simpson set up, the government has provided also for federal units whereby the government would allocate timber to the mills in this region. There's one in Flagstaff, Arizona; Lakeview, Oregon is another one.

ERM: That was done in the Grays Harbor area, too, wasn't it?

GLD: There is a unit in the Grays Harbor area. This arrangement was to provide for cases like that where it was the best solution. That, of course, has been under protest. The mills in Puget Sound were unhappy over that.

ERM: This Simpson story is an interesting area of forestry and forest industry history; it's a unique chapter.

GLD: We just happen to be the one unit that was tried out. I think Dave Mason gives more of the background in his book because it was his brainchild.²⁸

ERM: Well, that's his life cause, in a way.

GLD: Yes, he was interested in working those things out and was helpful to a lot of people.

ERM: I think Dave has been somewhat disappointed in the rather minimal success of the act. Yours is really the only good example to come out of it, isn't it?

GLD: We were the one area that had the potential.

ERM:, But I think Dave must have had much larger hopes for sustained-yield application in sustained-yield unit contracts with the Forest Service than just the Shelton unit.

GLD: Oh, he wasn't thinking only of Shelton; Dave had a broad concept.

ERM: Right, which he hoped might be applied more widely.

GLD: Dave was very much interested. He was the agent for the lots of land ownership, like the Hill timber, which was located in areas with surrounding national forest timber, and I think Dave was hoping that a program would be worked out, but it never was. I don't say that was his incentive, but I think that he could envision the possibility that it would work to the mutual interest of the community and all concerned.

ERM: Well now, that's a good point. Why do you suppose that Hill timber in Linn County, Oregon wasn't tied in with a sustained-yield unit arrangement? They weren't in manufacturing, were they?

GLD: No, and I think the way that country opened up there were possibilities of getting more money out of the timber by selling to individual operators, which they did. They were always in the very favorable position of having people hungry for this timber.

²⁸ David T. Mason, *Forests for the Future: The Story of Sustained Yield as Told in the Diaries and Papers of David T. Mason, 1907-1950.* (St. Paul: Forest Products History Foundation and Minnesota Historical Society, 1952).

ERM: It's a very interesting subject.

GLD: I don't know what the attitudes of the Hill heirs were. Possibly they were interested in getting their money quickly and safely, which they could do by selling at an opportune time.

ERM: Of course that timber has provided a good deal of the money that's gone into creation of the Hill Foundation, which has done a great amount of good in education and medical research and a lot of very worthwhile projects.

GLD: Well, there are very able people handling the fund and they probably knew what they were doing.

ERM: George, I'd like you to give a little time to recount some of those famous stories of yours that you tell with such gusto. You've got certain stories, I think, that you probably favor over others; favorite tales you like to tell. You've told one about an introduction you made to the Logging Congress program a year or two ago I thought was very, very good. I'm thinking of the story you told about the first historical record of a logging operation as recorded in the Bible.

GLD: I had a very wonderful secretary who was quite religious (worried, I think, about the future for some of her bosses).

ERM: Who was this?

GLD: Miss Emma Richard up in Shelton. I had to head up a panel at the Logging Congress in Victoria one year on "Organizing the Logging Organization." I had a dim memory from Sunday school days of King Solomon and Hiram of Tyre getting together timber for the temple. So I asked Miss Richard to dig up the reference. The next day on my desk was this neatly typed reference to I Kings and II Chronicles.²⁹ It's fascinating because it's probably the first logging organization ever recorded. Earlier civilizations in Egypt and Babylonia and Syria and those countries had no timber. They depended on rock or adobe. But in the hills of Lebanon, north of Jerusalem, was timber, so Solomon and Hiram got together, probably over a few tankards of mead, and decided they'd do a little logging. Solomon was to furnish the men and the provisions and in these verses in the Bible he described how many men they were going to send. He was going to send 30,000 men for the job, of whom 10,000 would be on the job, another 10,000 would be going back and forth from home, and the other bunch would be back at home seeing that the kindling was split for their wives, which was typical of loggers, they're always on the move.

They went into provisions; everything was in thousands of measures of barley and measures of corn, and the wine and the oil were in baths. After I looked this up at home, I asked Emma, "What's a bath?" The next day she had a typed statement that according to Webster or the biblical dictionary, it was 9.8 gallons. I thanked her for it, then without her knowing it, I did a little arithmetic and reduced the 20,000 baths of wine I think it was, into gallons. Knowing the potency of scotch and wine were quite different, I reduced it still further till I got down to the potency of scotch and finally I broke it down into cases. It came out that during the sessions of the Logging Congress (they were in the four-day sessions), had we had as much liquor to drink as Solomon furnished his men, we would have had something like 300 cases per session of the Congress. I knew very well that the machinery people had never been that generous, and I chided them on it. Then I compared the efficiency of Solomon and his crew with our modern-day logger who, on this limited amount of liquor, had not built one little measley temple in Jerusalem, but had rebuilt Tokyo and San Francisco, fought two world wars and had supported twenty years of the Democratic administration. So I thought we were a damn sight better loggers than

²⁹ *See* Appendix B, pp. 112-113.

Solomon. Then I commented on another fact that I think revealed what an understanding man Solomon was when he realized that his loggers couldn't be in the woods all the time; they had to be home doing family chores once in a while. After the discussion was over, Russ Mills got up, a logger in British Columbia, and he said he didn't realize I was quite such a biblical student, but he couldn't figure out how a man with 900 wives ever had any time to do any logging anyway! So the next day, the staid old Victoria columnists of the paper printed an account of the meeting, and the only thing they commented on was this damn story of Solomon, including his wives. So when I went back to Shelton I showed Miss Richard a clipping and said, "You realize what you got me into?" She didn't know a damn thing about it, of course. She said, "He didn't have 950 wives, he only had 692." I said, "Emma, when you get past the first 500, it doesn't count anyway! "

- ERM: Wasn't she a little bit skeptical of any biblical research assignments that you gave her from that point on?
- GLD: She never knew how I warped her information; I was quite cagey on that point; had to be.
- ERM: That's a great story, George. I think we're going to have to lift that one right out of the body of this interview and publish it.
- GLD: You better quote the Bible, first, and read it; it's fascinating. It must have been a terrific chore. Solomon even told Hiram how to bring the timber in log rafts down the Mediterranean coast to Haifa or someplace like that, and then back to Jerusalem. They couldn't bring them across country the whole way.
- ERM: That was going old Simon Benson and his sea-going rafts a few thousand years early, wasn't it?
- GLD: It was very interesting how this thing ties in. I was in Lebanon a few years ago and went up to that very interesting old city of Baalbek which was an out post of the Roman Empire protecting the trade coming in from India with the spices and all those things. The pillars on one of the ruined temples are made of beautiful polished red granite, and those stones, which are about six feet in diameter and about ten feet long, are built in sections with iron pins to hold them together. The story is that those stones were originally quarried from the banks of the Nile River in Egypt, transported to the Nile, floated down the Nile, floated up the Mediterranean 300 miles to what is now Lebanon and then transported over the hills of Lebanon to this town, which is on the east side of the hills of Lebanon. That's going over hills 2600 feet high. So it doesn't seem impossible to bring these logs down for the temple in Jerusalem.
- ERM: It's probably somewhat similar to the great stones at Stonehenge all the way from Wales across to Salisbury.
- GLD: Or the ones of Easter Island in the Pacific.
- ERM: There are some rather interesting wooden objects of ancient civilizations in the Museum of Art in New York; in the Egyptology section there are a number of mummy cases and things like that, and some of the actual models which were made by the ancient Egyptians and then buried in the tombs showing actual scenes of how they did certain things. The figures themselves are made of wood and have survived. That wood is still preserved.
- GLD: How the Egyptians got that wood, I don't know, because Egypt probably has no timber. Could have come out of Africa.
- ERM: Probably from the Sudan.
- GLD: Out of the Red Sea area, yes. Very fascinating.

ERM: It certainly is. Do you have any other biblical-based stories that you'd like to add?

GLD: No, I think that's all.

ERM: Your Sunday school teaching or training didn't leave you with any other applicable stories?

GLD: Not on that score.

ERM: Tell me a Little bit about Chris Kreienbaum. You must have some recollections and anecdotes you can tell about Chris.

GLD: Well, except that he's a wonderful example of a man who's educated himself. Chris's schooling was limited to high school, but he shows what a man can do if he applied himself and reads the right kind of literature. Chris has always been a great reader.

ERM: You and he must have been very close in the years at Simpson.

GLD: Oh, yes, naturally. We lived next house to each other for a while. Later he became president of the company and then our relationships were even closer because Chris was always very sympathetic and interested in anything that meant better public relations or better forestry.

ERM: How would you characterize his contribution to the Simpson story?

GLD: Well, I think he gave them leadership at the start in manufacturing the products that Simpson knew nothing about. Chris's guidance was very good there, and then of course in the sales. He recognized early that you couldn't develop new products and ideas without cooperation of the other people in the industry. Chris always worked very hard for better public relations and better relations in the industry itself through the trade associations, and things of that kind. He was responsible for setting up the Puget Sound Associated Mills with smaller mills to start with, and he was very much interested in long-range management. His recommendations were always very helpful.

ERM: Another man I've come to know in the Simpson organization whom I respect a good deal, is Dave James. Do you know something about Dave?

GLD: We were very fortunate to get Dave. When Chris became president of the company he realized that there was need for a good sound public relations program. He hired Rod Olzendam, who had been with Weyerhaeuser and had a separate public relations organization, to make a survey of the company. One of the things he strongly recommended was that we have a trade publication for our own organization and that we get someone in to set it up, and he brought Dave in.

ERM: Dave had been a newspaperman?

GLD: Yes, he'd worked as a newspaperman. Dave is a wonderful asset because he's a very down-to-earth fellow. He's a local boy, raised in that country, and talks the language.

ERM: Chris Kreienbaum gives you a great deal of credit, George, for having conceived in lots of ways the basic public relations of the company before Dave ever came on the scene.

GLD: Well, I was interested in things. I'm interested in people—always have been.

ERM: He said that you had done a tremendous job to reach the people of the Shelton area and all of the communities that were involved in the Simpson operation.

GLD: Our operations were scattered all over Mason County and a lot of Grays Harbor County. If you work next to people and their lands, you either get along with them or you don't get along with them. The way you get along with them is by taking interest in their problems and trying to get them interested in your problems. Of course, fire was always a problem. There would always be a conflict with a rancher who wanted to burn when he thought the stuff would burn best, which was generally the worst time to burn from the standpoint of fire protection. I like people and it's fun working with people if you enjoy them.

ERM: Another area of personal concern that Chris mentioned to me about your work with the company was in developing a fine safety program within the company's structure.

GLD: I was interested in safety because that involves, again, human relations. We had a safety man on the payroll but he was just a figurehead. All I figured that he ever did was develop a pretty good seat to put in the cookhouse; he was a carpenter's son. I got interested in safety early; took quite a lot of interest in trying to keep better records, especially investigating all the accidents to see if we could avoid future mishaps. There's a lot of bad philosophy among the loggers—if you had one fatality, you had to have three in a row. With that philosophy, you don't correct things very quickly.

ERM: How did you go about getting them to change, then? Men are pretty hard to change.

GLD: I set up safety meetings in the camp. I had committees in the camps, and once a month I'd go up and go over the accident reports for the month before. It meant time; I put in lots of late hours driving home from camp at night, but it got these fellows interested. Then we started trying to make incentives for them. We worked out programs where the camp that had the best safety record, had a prize drawing at the end of the month, a pair of logger's shoes, something like that. We didn't give them money—they'd spend it on beer—but give them a pair of good safety shoes, and boy, they'd be talking about those for the next week. These things all helped out.

The thing that I think we can have a little bit of credit for is the improvements in the equipment on the logging tractors. Any time a fatal accident occurred, I made a personal trip to the scene with the state inspector to get all the facts and see if there's anything we could do. We had a man killed by a tractor pulling a tree over on him. So we had our shop build a guard over the tractor. A lot of operators didn't want it, they said they couldn't see, but we felt they better have it. Now they're standard part of a tractor. A year or so afterward one of our friend's sons was driving a tractor with a cable dangling on the road behind. It picked up a little log and came back and crushed his skull so we immediately had a guard put on the back of the tractor so anything coming from the back, like a line breaking, wouldn't kill the operator. Now that's all standard equipment on tractors. It all goes back to this idea of taking an interest in an accident to see if you can avoid its happening a second time.

ERM: When you made your investigations of these accidents, did you ever encounter any reluctance on the part of the men who were out there to give the information you wanted?

GLD: Yes, they'd be kind of reluctant. I'll give you a good example of that. we were logging quite steep country at Camp 3 and a widow-maker came down out of a tree being felled. You know what a widow-maker is—a broken-off branch that's hanging up in the limbs. I went up there with a state inspector and talked to this fellow's partner and I was quite amazed. The man that was killed had a good path to get away from the tree when it started to fall, while the man that wasn't hurt had a more difficult way to go. So I wondered why this man that had the easy way to go didn't get away and the other fellow did. Then I noticed that the tree had slid down the hill probably 150 feet. It was our practice that after a man felled a tree, he wrote on the butt of the tree the number of the tree, the day he had cut it, and the crew, so that when the scaler came along he'd give them credit for it. I noticed out of the corner of my eye that there was writing on the butt of

this tree that had slid down the hill. Several days afterwards when the surviving man got over his shock, I ran across him and I said, "I can't figure out one thing, Bill: how you would've taken the time to go down the hill and write your name on that butt after your partner was lying there dying?" He said, "I didn't write that on there." I said, "Who wrote it on?" He said, "He did." And then he said, "In order to avoid climbing down and up the hill, he had the habit of waiting until the tree started to go over, then he'd lean down and write on the butt as the tree was breaking out of the stump." I said, "You didn't tell me this the other day." Well, we put out an order: any man who was caught doing that was off the payroll, period. There was a case where if you hadn't followed up that investigation, other men might have died the same way because people are lazy; they try to avoid things. I never regretted the hours I put in doing that. Since then, they have safety men working all the time on those things, but I think it was a good start on the program.

- ERM: What do you mean you have safety men working all the time on these things?
- GLD: Well, they have regular safety men whose job is to promote safety meetings, inspect the work area, and follow through on investigations.
- ERM: They are out there in the woods keeping closer tabs on the men.
- GLD: They drift around through the crews, yes. I felt these safety meetings were very healthy public relations. I always thought that if the crew thought you were sincere, they respected you. Lots of times when I didn't have much to say, we discussed baseball or football or both for the evening. That didn't hurt any. I tried to get close to my crew, as much as I could; they called me by my first name or even begged a chew of tobacco or something like that. Didn't hurt.
- ERM: George, you knew Ted Flynn very well and he's becoming something of a legend in the woods out here.
- GLD: Ted and I were very close friends when I was in the Forest Service in Portland. He was an engineer with the engineering staff and very much interested in road construction. Ted and I have been out on some big fires together. He was very ingenious; always doing constructive things. In California he had seen a blade on a tractor which was designed originally for filling up trenches after they had put in gas lines. He conceived the idea that it might work to punch out fire breaks and roads. Willamette Iron and Steel got interested in it and worked with him so we had one of the first bulldozers, just the straight blade that couldn't be angled. Ted made one with an inverted V-blade for Hyster, which had the same effect. You could carry the dirt with it, and you could dig into a bank.

Ted had another brilliant idea. All the early bulldozers fastened on to the drawbar in the back of the tractor; a big yoke went around the tractor like a U and hooked onto the drawbar. You'd back up and this cumbersome yoke would hang up on a stump and there you'd be sitting doing nothing. Ted's idea was to fasten the blade into the axle. He figured out that all the strain of action of the bulldozer comes through the rear axle anyway, so it doesn't make any difference whether you hook it on to the end of the axle or on to the back of the tractor, you're shoving through your axle, and he was right. Every bulldozer today hooks on to the axle. But he was ahead that far.

And then Ted was really the originator of the first winch behind a tractor, which is the essential part of a tractor; there isn't a tractor operating today without a winch on it. Ted had the first ones made, I think, by a blacksmith somewhere up in the Wind River country. Ed Stamm also gets a lot of credit for the bulldozer. Ed was just like we were, trying out things, but Ted was the first to think of the thing as a dirt mover.

ERM: That's interesting to know. He was a very inventive guy.

GLD: Another interesting thing he did was experiment on the use of oil filters on tractors. The first oil filters came out using diatomaceous earth to filter the oil, and particles of that would get into the oil and, of course, act as abrasive. Ted had the idea to use solvent cotton like the ones today. But to start with, heavy equipment, like tractors, didn't have any filters. When I went to Simpson I knew what Ted had been doing and I got in touch with him again and found out all the things that he had developed by that time. The standard requirement was to change oil every 40 hours. After we put filters on our tractors, we changed every 160 hours; once a month. It took seven gallons of oil at a change, so that's quite a saving. I told Tom Murray's [Murray-Pacific Corporation formerly West Fork Timber] man about it, and he put it on. But one of the Caterpillar men came around and threatened not to guarantee their machines if we kept the filters on. It made me so mad, I went down and saw Powers Wicks, who was representing Caterpillar. He said, "I don't care if you use urine in it, we'll stand behind it." That's all I wanted to know. Well, within a year, Caterpillar came out with oil filters.

ERM: Were most of the manufacturers generally receptive to ideas?

GLD: Yes, the logger told them what he wanted. They didn't come out and invent the machine; the logger went to fellows like Ed Stamm, and Jack Morgan and said, "This is what we want; now you see if you can design it," and maybe even helped them design it.

ERM: Where are the solutions usually worked out? Right there in the field?

GLD: In the woods; practical men having suggestions, and other men listening. If a man working in the rigging has an idea, generally his boss will take that idea and if it sounds practical, give it a try, work it out with the cooperation of the: machinery people. Oftentimes it comes merely from trying to avoid a little hard labor, which is smart. If we found shortcomings in the equipment available to us, we'd try to improve it.

ERM: Can you tell me an example of how you went to a manufacturer and gave him a problem and an idea you had, and he followed up on it and produced something that worked?

GLD: When we got the first Caterpillar tractors, they were basically agricultural equipment, and naturally they thought, well this has been all right, why change it? We had lots of headaches with the machine because of the uses we put it to. A machine that had been running over the corn fields of Kansas and put down among some stumps, would just have hell knocked out of it. So we put pressure on the Caterpillar people to get things changed, and for a while they just said we can sell enough of them and if you don't like it, that's up to you. Then they got wise and put Powers Wicks on the payroll- he had been chief engineer at Hyster Iron Works. When he became their liaison officer we began to get improvements. We have a logging tractor now which is entirely different from one designed to sell to a rancher.

ERM: How did it differ?

GLD: Guards, reinforcements in certain places.

ERM: Did it have a different tread on it?

GLD: Not so much the tread, although they did make some improvements on that; mainly reinforcements in the right places so it could stand abuse, and ease in keeping it lubricated.

ERM: Because of the heavy dust problem?

GLD: In a wheat field you have a dust problem. We had more mud problems. Of course, we used to have to lubricate the rollers every certain number of hours, and they're very difficult to lubricate

out in a muddy field. Now they're much more dependable. One of the first troubles we had was with the rocker arms. Working in the farmland was practically level and they never had any trouble, but up on the steep hillside, it would just pump oil right out of the reservoir into the engine and you'd be running out of oil or flooding your engine and killing it. So we had to get them to put on a drainpipe to drain this excess oil.

ERM: Who were some other inventive men that you knew in the woods, either in your own company or in others or in the Forest Service who came up with really original ideas?

GLD: Well, I think Jack Morgan from over near Headquarters, Idaho; he's been one of the more inventive people we've had.

ERM: Who was he with?

GLD: He has his own organization now, but he started with Boise Payette up around Headquarters, Idaho.

ERM: What do you associate with him? What did he invent?

GLD: All kinds of yarding equipment especially for that country over there.

Another fellow I always had a lot of respect for is Emmit Aston. He was Biles-Coleman's woods manager. Emmit has been a very good citizen and a very good practical forester, inclined to develop new techniques.

ERM: What would you say his principal contribution was? He was a road man, wasn't he?

GLD: He was keenly interested in roads and headed up all the industry's approach to dealings with state organizations on road specifications and things of that kind. He was very effective. Bob Kennedy is another one; used to be with Kinzua, then had a logging contract down in Klamath Falls country.

Of course, I'd put Ed Stamm of Crown Zellerbach number one above everybody else because Ed was such an outstanding, all-around person. Ed was very progressive. He'd try anything he heard of that he thought would have an application. That's the fine thing about Crown Zellerbach. They've been very helpful in encouraging their men to come up with new ideas, giving them money to go ahead and try. Industry owes a tremendous debt to those fellows, I think. Crown Zellerbach has been outstanding in so many ways, especially in developing better equipment.

ERM: What else do you associate with Crown and Stamm as leaders?

GLD: I think they were one of the first to consider the use of portable spars of different types, besides building up a wonderful esprit de corps in the whole organization. C-Z has always had a lot of keen young fellows because they have given them a chance to express themselves or try things out. It paid off.

ERM: I'm very favorably impressed with some of the people I've got to know in Crown in recent years, Clarence Richen being one of them.

GLD: He's a very high type of man, typical of the company. I think the rank and file of Crown executives all the way down the line is just tops, and partly because of the atmosphere of the company.

ERM: There's an intellectual curiosity that is always at work.

- GLD: To illustrate C-Z attitudes, when Ed Stamm was given a retirement party in Portland by the company, attended by people all up and down the coast, I was favored by being asked to express the feeling of the industry toward Ed. So I worked up a booklet with "This Is Your Life, Ed Stamm," patterned after the TV program. It's a good way because you can read the damn thing and it doesn't sound too formal. We had a little dress rehearsal before the meeting. Don Denman was head of the program. I read what I had to say about Ed, which wasn't too long, mentioning the improved techniques he and the company had been responsible for, and expressing how much the industry was indebted to Ed and to the company for these things. I said I hoped that when he retired, we wouldn't lose all the benefits of his experience, and that the company was going to miss him as well as the industry. Don said, "I want you to change a sentence in there. I want you to cut out the part that the company is going to miss him; that he won't be a part of the company, because when Ed retires, he's still part of the Crown Zellerbach organization." That has been a fine contribution to the esprit de corps in Crown-they have not put their retired executives on the shelf. They have made them feel they are still part of the organization. They've given them office space at times or put them in a consulting capacity. They're always on call. In so many companies you get to be sixty-five and you're a pretty good boy today but tomorrow you're just a fossil. That's one thing Crown never did. I've always felt very complimented when Crown would call me in to make a decision somewhere for them.
- ERM: You get the impression that they're progressive, always thinking ahead.
- GLD: What impressed me was their attitude toward their employees. I've been to their meetings. They've had organization meetings quite frequently in different areas, to discuss safety and other things. It's really worth observing because you can see that everybody's interested in the problem.
- ERM: I was going to ask you, too, about Arch Whisnant. I was just looking over an interview I made with him years ago. Now there was a real character that you must have known pretty well.
- GLD: Whis? I worked with him a long time.
- ERM: Can you tell me any stories about Whis that would characterize him?
- GLD: Well, before Whis went with the Logging Congress, he had quite a lot of financial problems. He'd tried to run a paper in Bend, Oregon and it was a flop financially, I guess. When Norm Jacobson left Brooks-Scanlon or the Forest Service, he was kind of struggling for a job, and began selling life insurance. He was trying to sell some to a fellow I know who's an awful tightwad and he wasn't doing very well, so he said, "Well, I sold a big policy of \$50,000 today"—some thing like that—"I'm selling lots of it around here." So this tightwad fellow said, "Who was he?" and kept prodding him. Turned out Norm sold it to Whis! Well, hell, Whis couldn't put it on a \$10 one. Whis is a loveable fellow, but we had to ride herd on him pretty close.
- ERM: He was irresponsible with money, you mean?
- GLD: I mean, he was fine in his public relations and things like that, but didn't have any knowledge of how much money it took to do things.
- ERM: He didn't have a business sense at all.
- GLD: Every president had to ride herd on him. He'd throw big shows at the Logging Congress that'd just break us. Like the one down at Seaside—I was the president. It was a terrible place to hold it because there weren't enough housing facilities. There were other problems and I had to run the damn show after I got down there. We finally squared that around by getting another member of the Logging Congress to come in to handle the housing and that stuff because Whis just couldn't do it. He was fine in arranging the programs and making the contacts and all that

part of it—he's a loveable cuss- but you had to worry just like a father looking after his wayward son once in a while.

- ERM: Well, Carwin Woolley who has come in and taken Whis's place is a good fellow, I think.
- GLD: A very able fellow. Whis brought him into the organization. Carwin has a lot of ability, does things in a calm way.
- ERM: He's a very quiet, unobtrusive sort of guy.
- GLD: He had a good record in World War II; he got up to major, I think, through his own ability.
- ERM: Who among the people in the field of forestry do you rate the highest, in your estimation, in their work out here in this area of the country? When you think back over the years, who stands out in your mind?
- GLD: Of course, I've known more in the Northwest than other places; we've had some very able fellows. C. S. Chapman was very able.
- ERM: Weyerhaeuser's man?
- GLD: Weyerhaeuser's Chapman. I think I told you the story about when we were doing the follow up of Article X—educating the industry—and how two fellows at the Eugene meeting got him mixed up with C. C. Chapman who published the *Oregon Voter*.

We had a hot night down there—that was a busy week, but we survived it. Then we went down to Coos Bay and everything was lovely, and we got plenty to drink and wound up about two o'clock in the morning somewhere. That was a fascinating night. Whis was along. He insisted we go out to see Mr. Simpson—there was a Simpson Timber Company in Coos Bay in the early days. It was a big outfit that shipped a lot of lumber to California and they had ships back and forth all the way. One of the sons was a worthless son of a gun, but we went down to visit his place. We got out there and they didn't have any electricity; we sat around in the dark—hell of a stormy night.

But the story of this Simpson was fascinating. He was a problem child to his father, so his father thought to get rid of him he'd send him on a ship going to Australia and make him a supercargo. So he shipped this kid off and when he got to Australia, he fell in love with this prima donna person from a company playing *Pinafore* or something, and they were broke in Australia. The story was he'd read the law and it seems that the law says that supercargo can sell the ship some way. So he sold this ship in Australia, took the money, and started to London with this prima donna and all this troupe of broken-down actors. When the old man found out what was happening he started across the Atlantic to catch the kid in London, and the kid's mother wired to London: "Dad's coming on his way; you'd better get the hell home." So he jumped on another ship and they passed in the mid Atlantic and he was back in Coos Bay before the old man got home. He's quieted down, but it's quite a story.

- ERM: The course of most industry-organized associations has been kind of checkered. They've always had big ups and downs, haven't they?
- GLD: There have been periods of a good market which have been helpful. Then you get officers in sometimes who don't know how to run it. The year I was president in 1937, we had the machinery show at Seaside that earned about \$2,000 for the Congress. The next year, Walt Ryan, of Weyerhaeuser, was president and he decided to have the meeting up in Tacoma where he lived; thought it would be nice to take the whole bunch on a trip around Puget Sound. So they hired a big ferry boat. They blew every damn cent I'd earned the year before, so they wound up

the next year broke again. Now they have a machinery show about every third year and they make enough money on that to keep them going.

ERM: By the time the next machinery show comes around, they're out of money again.

GLD: Well, we've got a little money in the bank—it helps. The Congress was in trouble lots of times; some of the individuals had to put up money to finance the thing out of their own pockets. But it's been well-run now.

ERM: Charlie Cowan has always been an interesting personality in this whole picture.

GLD: Charlie's interesting regardless of his occupation.

ERM: Charlie was a pretty good manager and pretty good with a buck, wasn't he?

GLD: He spent his money very wisely. I was on his board the Washington Forest Fire Association for years and years. When I first went on the board right after Charlie was in, the state of Washington (western Washington) was half protected by the Washington Forest Fire Association and half by the state of Washington. They divided the territory. Later on Ted Goodyear decided, by God, they wanted the state to run the whole thing, and he wasn't all wrong. I didn't agree with Ted on lots of things, but the split made quite a problem. The Washington Forest Fire Association collected the money on our own membership lands, then turned the money over to the state. Of course, that was good to have money-raising control in private industry. They've had some problems but I think they're doing a pretty good job.

ERM: It's all run by the state now.

GLD: Oh, it has been for years and years. Of course, when Bernie Orell got in there, we didn't worry about the state ruining it. We never got along with Ted. He'd tell you things you knew very well weren't so. We had a bill in the state legislature that was prohibitive as far as industry was concerned and Ted implied he never heard of it, and we knew very well he knew more about it than we did. We couldn't call him a liar at the meeting, but why a man would do that, I don't know. It's not smart. We were very happy when Bernie Orell came in.

ERM: Had Bernie been working under Goodyear?

GLD: No. Bernie had worked for the state of Oregon. Art Langley brought Bernie up there and put him in charge of Washington; best move that ever happened. And Mike (L.T Webster) had been working under Ted all these years as his assistant, never getting anywhere because he never was given any authority. When Bernie came along, he began to give Mike authority and when Bernie stepped out, Mike became state forester and a good state forester because he had some chance to develop his own initiative.

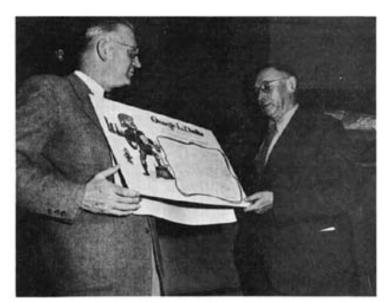
ERM: George, I want to thank you for the time you have spent in sitting for these interviews and the information you have provided. I'm sure it will be useful to students of forest history.



George L. Drake, vicepresident and chief forester of Simpson Logging Company, 1948. Drake always wore a fedora in the woods--rarely a hardhat. Photographs on this page courtesy of David A. James, retired vice-president of Simpson.



Taken at the time of his retirement, 1954.



Dean Gordon Marckworth, University of Washington College of Forestry, presenting Western Forestry Association appreciation award to Drake, then president of Society of American Foresters, 1953.



Camp Grisdale in the frame on the wall. This was Drake's dream of a place where working loggers and their families could live in clean and comfortable homes.

APPENDICES

CONSTITUTION

FIRST—The name of this Association shall be the Pacific Logging Congress.

SECOND—The membership of this Congress shall consist of all who are engaged in or connected with logging operations in whatsoever capacity.

THIRD—The object of this Congress shall be to act as an exchange of ideas, to promote fellowship and good feeling, to record experiences and improvements in the engineering of logging and to cement the bonds of fraternity among those engaged in the industry.

FOURTH—Regular meetings of this Congress shall be held once each year, and on such particular days, and at such places as may be decided upon by the executive committee, thirty days' notice being given to the members.

FIFTH—The officers of this Congress shall consist of a president, vice-president, secretary-treasurer, and an executive committee, consisting of one representative from each state represented in the membership. The duties of the executive officials shall be those usually incumbent upon such positions.

SIXTH—The dues of the Congress shall be ten dollars per annum for each member, to be paid on or before January 1 of each year. All members whose dues are in arrears for a period extending over more than one year shall be dropped by the secretary from the roll of membership.

SEVENTH—The order of business at the annual meeting shall be as follows:

- 1. Report of previous meeting.
- 2. President's report.
- 3. Secretary's report.
- 4. Treasurer's report.
- 5. Report of executive committee.
- 6. Election of officers.
- 7. Addresses and papers on suitable subjects.
- 8. Adjournment.

EIGHTH—The executive committee may ca 11 special meetings for the discussion of subjects of interest to the industry at any time after giving twenty days' notice to the members of the Congress.

NINTH—Amendments or additions to this constitution may be made at any regular meeting upon a two-thirds vote of the members present.

II. CHRONICLES

Chapter 2

- 8 Send me also cedar trees, fir trees, and algum trees, out of Lebanon: for I know that thy servants can skill to cut timber in Lebanon; and, behold, my servants shall be with thy servants,
- 9 Even to prepare me timber in abundance; for the house which I am about to build shall be wonderful great.
- 10 And, behold, I will give to thy servants, the hewers that cut timber, twenty thousand measures of beaten wheat, and twenty thousand measures of barley, and twenty thousand baths of wine, and twenty thousand baths of oil.
- 11 Then Huram the king of Tyre answered in writing, which he sent to Solomon, Because the Lord hath loved his people, he hath made thee king over them.
- 12 Huram said moreover, Blessed be the Lord God of Israel, that made heaven and earth, who hath given to David the king a wise son, endued with prudence and understanding, that might build an house for the Lord, and an house for his kingdom.
- 13 And now I have sent a cunning man, endued with understanding, of Huram my father's,

- 14 The son of a woman of the daughters of Dan, and his father was a man of Tyre, skilful {sic} to work in gold, and in silver, in brass, in iron, in stone, and in timber, in purple, in blue, and in fine linen, and in crimson; also to grave any manner of graving, and to find out every device which shall be put to him, with thy cunning men, and with the cunning men of my lord David thy father.
- 15 Now therefore the wheat, and the barley, the oil, and the wine, which my lord hath spoken of, let him send unto his servants:
- 16 And we will cut wood out of Lebanon, as much as thou shalt need; and we will bring it to thee in flotes {*sic*} by sea to joppa; and thou shalt carry it up to Jerusalem.
- 17 And Solomon numbered all the strangers that were in the land of Israel, after the numbering wherewith David his father had numbered them; and they were found an hundred and fifty thousand and three thousand and six hundred.
- 18 And he set threescore and ten thousand of them to be bearers of burdens, and fourscore thousand to be hewers in the mountain, and three thousand and six hundred overseers to set the people at work.

I. KINGS

Chapter 5

6 Now therefore command thou that they hew me cedar trees out of Lebanon; and my servants shall be with thy servants and unto thee will I give hire for thy servants according to all that thou shalt appoint: for thou knowest that there is not among us any that can skill to hew timber like unto the Sidonians.

7 And it came to pass, when Hiram heard the words of Solomon, that he rejoiced greatly, and said, Blessed be the Lord this day, which hath given unto David a wise son over this great people.

8 And Hiram sent to Solomon, saying, I have considered the things which thou sentest to me for: and I will do all thy desire concerning timber of cedar, and concerning timber of fir.

9 My servants shall bring them down from Lebanon unto the sea: and I will convey them by sea in floats unto the place that thou shalt appoint me, and will cause them to be discharged there, and thou shalt receive them: and thou shalt accomplish my desire, in giving food for my household.

10 So Hiram gave Solomon cedar trees and fir trees according to all his desire.

11 And Solomon gave Hiram twenty thousand measures of wheat for food to his household, and twenty measures of pure oil: thus gave Solomon to Hiram year by year.

12 And the Lord gave Solomon wisdom, as he promised him: and there was peace between Hiram and Solomon; and they two made a league together.

13 And king Solomon raised a levy out of all Israel; and the levy was thirty thousand men.

14 And he sent them to Lebanon, ten thousand a month by courses: a month they were in Lebanon, and two months at home: and Adoniram was over the levy.

15 And Solomon had threescore and ten thousand that bare burdens, and fourscore thousand hewers in the mountains;

16 Beside the chief of Solomon's officers which were over the work, three thousand and three hundred, which ruled over the people that wrought

PROFESSION OF LOGGING ENGINEERING

(Extract from resolution adopted Fourth Session of the Pacific Logging Congress, Tacoma, Washington, July 25-26-27, 1912.)

The Congress pledges its hearty support and best efforts to the creation of the profession of logging engineering as a distinct branch of mechanical science; and its co-operation in the endeavor of the different universities to create a department of logging engineering. We believe the timbered states and provinces of the West should make liberal appropriations for the adequate equipment and proper maintenance of logging engineering courses in their universities and for the securing of the highest type of educators for furthering the work.

And Whereas, The logging and lumber industry is probably the largest single contributor to the support of our higher educational institutions, and such institutions have for a long time supplied special courses for those engaged in other industries; now, therefore,

Be It Resolved, That the fourth session of the Pacific Logging Congress does hereby petition the state universities of California, Oregon, Washington, Idaho, Montana and British Columbia, to provide courses in logging engineering and to grant degrees upon completion of such courses. Your committee suggests that there be appointed a committee of three in each of the various states and provinces asking support for such a chair of logging engineering. This committee to have full power in each state or province to raise money by donations or otherwise necessary to carry on the campaign, or, if advisable to assist directly in the support of such a chair of logging engineering. This committee to co-operate with the faculties of such universities in planning such courses as may be required. Your committee suggests the following, to serve upon such committees:

British Columbia—A. D. McRae, Canadian Western Lumber Co., Ltd., Vancouver; Peter Lund, Crows Nest Pass Lumber Co., Wardner; John Hendry, B. C. Mills Timber & Trading Co., Vancouver.

Washington—Geo. S. Long, Weyerhaeuser Timber Co., Tacoma; J. J. Donovan, Lake Whatcom Logging Co., Bellingham; E. P. Blake, Washington Log Brokerage Co., Seattle.

Idaho—T. J. Humbird, Humbird Lumber Co., Sandpoint; Wm. Deary, Potlatch Lumber Co., Potlatch; A. F. Blackwell, Panhandle Lumber Co., Spirit Lake.

Montana—Kenneth Ross, manager lumber department, A. C. M. Co., Missoula; W. E. Wells, Somers Lumber Co., Kalispell; G. W. Millet, Libby Lumber Co., Libby.

Oregon—J. S. O'Gorman, Wisconsin Logging & Timber Co., Portland; H. C. Clair, Clarke County Timber Co., Portland; J. D. Young, Inman-Poulsen Logging Co., Kelso, Wash.

California—W. W. Peed, Hammond Lumber Co., Eureka; Geo. X. Wendling, Weed Lumber Co., San Francisco; C. R. Johnson, Union Lumber Co., San Francisco.

FRANK H, LAMB, Chairman, A. W. CLARK, J .A. IZETT.

INDEX

Agricultural Appropriations Act (1912), 49,96	Aston, Emmit, Biles-Coleman Lumber Company,18,21,62,106
Alaska, 5-6,51-2,54-6,58-9,62,64 Aleutian Islands, 57	Athey tracks, 8,79
Anchorage, 6,55 Juneau, 56-8,89	Australia, 108
Mendenhall Glacier, 89 national forests, 5-6 salmon canneries, World War I, 6,54-5,58	Baker, Hugh, Syracuse University Forestry School, 48
Alaska Region (Region 10),	Baker White Pine Lumber Company, 59
U. S. Forest Service, 5-6,51-6,89 water resource survey, 53,56	balsam, 30
•	Barkley, Senator Alben W., 23
Allen, E. T., 29 and CLarke-McNary Act, 20 Pacific Logging Congress, 20	Barnes, Ephraim, timber cruiser, 65,67-70,72-5
American Federation of Labor (AFL), 14,86	Barto, Roy, U. S. Forest Service, 6
American Federation of Labor/Congress of Industrial Organizations (AFL-CIO), 86	Bass, Robert, governor of New Hampshire, 39
American Forestry Association, 4	Benson, Simon log rafts, 101
American Paper and Pulp Association, 29	Benson Timber Company, 25
Ames, Fred, U. S. Forest Service, 65,92	Diblo the
appraisal, timber, 66-8,97 see also sales, timber	Bible, the logging history in, 12,100-1,112-3
arch logging, 7-8 see also tractor logging	bigwheels, 7-8,79 see also equipment
Arizona, 71	Biles-Coleman Lumber Company, 18n,106
Flagstaff, 99	1011,100
Army, U. S., 59	Blakley, Sam, Brooks-Scanlon, 78
packing manual, 46	Bloedel-Donovan Lumber Mills, 20
Article X of Lumber Code, 22-7,31, 90,108	Blue Mountain Eagle, 69
see also National Industrial Recovery Act; Schecter Poultry	Boise Payette, 106
Case	Booth Kelly Lumber Company, 25,44

Boston Globe, 96

Bridal Veil Lumber Company, 11,61

Briggs, Clair and Article X of Lumber Code, 22

Briggs, James and Article X of Lumber Code, 24

British Columbia, 1,9,21,26,57,114

Brooks-Scanlon, 64-5,68,71,73-4,78, 98,107

Brown, Fred, Cedar Logging Company, Ltd., 21

Brown, Nelson, 83

Buck, C. J., U. S. Forest Service, 83

burning, slash see disposal, slash

California, 17,49,48,64,99 Los Angeles, 6 San Francisco, 19 state forestry laws, 23 steam tractors, 79 Trees of Mystery, 84

camps, Logging living conditions, 9-12 W. C. Ruegnitz speech, 11,61

Canada, 5,10,83 British Columbia, 9,21,26,57,114

Carter, E. E. "Nick"; U. S. Forest Service, 82

Cary, Austin, U. S. Forest Service, 77

Cascade National Forest see Willamette National Forest

Caterpillar tractors, 105

cedar, 93,112-13 Port Orford, 94

Cedar Logging Company, Ltd., 21

Chaffee, R. R., Pennsylvania State University, 48

Chapman, C. S., Weyerhaeuser Company National Lumber Manufacturers Association, 29 and Article X of Lumber Code, 22,24-5,108

Chugach National Forest, 5-6

Clapp, Earle H., U. S. Forest Service, 82

Clark, E. T.
University of Washington Forestry
School, 20
and Article X of Lumber Code, 22,24-5

Clarke-McNary Act (1924), 20

Cliff, Edward P., chief, U. S. Forest Service, 82

coal industry, 23 union, 87

Coeur d'Alene National Forest 1910 fire, 55

Collins, Truman, Collins Pine Company, 21

Collins Pine Company, 21

Columbia National Forest, 49

Columbia River, 5,7,59,64,74

Commerce, U. S. Department of, 22

communists, 86,88

Compton, Wilson, National Lumber Manufacturers Association, 29

Congress of Industrial Organizations, 86

Coolidge, President Calvin, 52

Cornwall, George M.
and Pacific; Logging Congress, 1-2,19
description of, 2
editor, *The Timberman*, 9,17,37
influence in teaching of logging
engineering, 1-2,37-8

Cornwall, George P., 38

Cowan, Charles S. and Article X of Lumber Code, 22-27 Washington Forest Fire Association, 6,21,64,109

Craighead, Frank, U. S. Forest Service, 41-2

Crater National Forest, 49

Crown Zellerbach Corporation contribution to industry, 106 Edward P. Stamm, 21,106-7 truck logging, 80

cruise, timber, 43,64-5,67

cutover, 90

cutting practices, 7,32

Deep River Timber Company, 21

Denman, Donald, Crown Zellerbach Corporation, 107

Depression, the, 23,83 labor unions, 87 Pacific Logging Congress, 19 Simpson Logging Company, 83,91

Deschutes National Forest, 65

DeWolf, Coyote, 66

disposal, slash, 15,63

Disque, Colonel Brice P., Spruce Production Division, U. S. Army, 61 donkey engines, 14-5 see also equipment

Donovan, J. J., BLoedel-Donovan Lumber Mills, 20,87

Douglas-fir, 30,33,73,79,93

Drake, George L. youth and family in New Hampshire, 2-3 education, 3-5,45,48 summer employment, 3-4,38-48, employment in Alaska with U. S. Forest Service, 5-6,51-8,89 employment in Oregon and Washington with U. S. Forest Service, 1,5,6-8,14, 38,49-51,59,64-7,70,73-4,77,83,87,90, participation in Pacific Logging Congress, 1,6,8-9,13-4,17-8,20-1,107-9 Article X of Lumber Code, 22-7 employment with Simpson Logging Company, 86-7,89-93 international logging group delegate, 12 association memberships, 19 marriage, 51-2 reminiscences, 39-40,43-8,57-8 on forestry in America, 82

Drake, Dora Polly, wife, 51-2

Dwyer, Robert, Dwyer Lumber Company, 21

Dwyer Lumber Company, 21

eastern United States, 4,11,18,44

East Oregon Land Company, 65

Edward G. Hines Lumber Company, 65,71-7,98 mill, 75

English, E. G., Lyman Timber Company and Pacific Logging Congress, 2,17

entomology, 41

equipment, 1,106 Forest History Society oral history collection, 7n,18n,22n,79n arch device, 7,79 Athey tracks, 8,79 bigwheels, 7-8,79 Forest Homestead Act (1906), 6n donkey engines, 14-5 fire, 40 forest management, 36,84-5,90-1,94, steam tractors, 79 96-8 tractors, 7-8,104-5 see also multiple use trucks, 80 Forest Products Laboratory, at Madison Wisconsin, U. S. Forest Service, 82 Eskimos, 57 Europe, 33-5 forest protection, 27-8,30,32-5 see also under names of individual see also Article X of Lumber Code; fire countries protection; forest management Forest Service, U. S., 3,7-8,9,32,41-2,45,49,53 exports 64,70,73,77,81,89-90,107 to Japan, 93-4 Article X of Lumber Code, 22-3 Ferguson, John, Pennsylvania State University, attitude toward Pacific Logging Congress, 6 School of Forestry, 4,46,48 experimental watershed, 5 fire lookouts, 45 Filberg, William, Pacific Logging fire study, 15,28 Congress, 21 Forest Products Laboratory, 82 forest surveys, 90-1 fire, forest, 42 grazing, 5,35,50-1 influence of World War I, 60 balloons, 42 lookouts, 45 national forests, 7,65-9,1-2,83-4,97 see also fire protection Pacific Northwest Region (Region 6),1,5-6, 38,49,67,70,81 fire detection device, 63 regulation of industry, 15,70-1,82 relations with industry, 76,81-2 sustained yield, 94,95-6,98-9 fire protection, 4,6-7,14-5,23,31,33-4,64,90 103,109 timber cruises, 41,42-4,49,66-7 Article X of Lumber Code, 25,27-8 timber sales, 6-7,65-6,67-9,71-2,75,91,98-9 U. S. Forest Service study, 15,63 see also names of individual national forests maps, 4,28 see also Washington Forest Fire Protection forest surveys, 90-1 Association Fritz, Emanuel., forestry education, 76-7 Fitzgerald, J. B., Lumbermen's Industrial Relations Committee, 87 Frye and Veazey logging camp, 5 Fleishel, Marc, National Lumber Gardner, Frank, timber broker, 71-2 Manufacturers Association, 29 Garrish, Ned, Brooks-Scanlon, 68 flu, epidemic, 59

Flynn, Ted, U. S. Forest Service, 104

Geological Survey, U. S., 53

Germany forestry in, 84 forests in, 36, 83

Gilchrist Timber Company, 78 employees community, 78

Girard, James, U. S. Forest Service, 66-8, 70-1,73,75-6 Girard Tables, 75

Goodyear, Ted, Washington Forest Fire Association, 109

Granger, Christopher M., U. S. Forest Service, 81

Graves, Henry S., chief, U. S. Forest Service, 48,89-90

grazing, 35,51 maps, 5,50

Greeley, Colonel William B., chief, U. S. Forest Service, 20,82 Article X of Lumber Code, 22-5 Forest Service timber sales, 65-6,68 influence on forest practices, 29-30 Twentieth Engineers, 90

Greenman, Judd, Oregon American Lumber Company, 87

Hagenstein, William, 26

Hanzlik, Ed., U. S. Forest Service, 94

Hardin, Jack, U. S. Forest Service, 35

Harrigan, W. D., Scotch Lumber Company, 70

Harvard University, 39,48

Hastings, Alfred, U. S. Forest Service, 43-4,49

hauler, log, 79 see also skidding; yarding

Heintzleman, Frank, U. S. Forest Service, 6,52,55,58

hemlock, 30,57,83,93

Herrick, Fred, lumberman, 67-76

Hines, Edward G. see Edward G. Hines Lumber Company

Hirst, Edgar C., 46,48 first State Forester, New Hampshire, 3,39 receives award of merit, American Forestry Association, 4 Snowshoe Club, 40-1

Hoffman, Bruce, U. S. Forest Service, 52-3,67

Hofmann, Julius, U. S. Forest Service Relative Humidity and Forest Fires, 15,63

Hoover, President Herbert, 83,94

Hyde, DeWitt, president, Bowdoin College, 39

Hyde, George, 39

Hyster Iron Works, 105

Idaho, 23-4,55,106,114 Coeur d'Alene, 68

India, 26,101

Indians, 57-8,71,78

Industrial Forestry Association birth of, 26-7 timber tax study, 64

Industrial Workers of the World (IWW), 13-4,86-7 and logging camp conditions, 9-10

Inland Empire, 17

International Woodworkers of America (IWA), 86

Interior, U. S. Department of, the conflict with Forest Service, 6,55

Iowa, 84-5

Irving, Joseph, Sultan Railway and Timber logging industry Company, 11 Article X of Lumber Code, 22-7,31,90,108 forest protection, 20,23,25,27-8 government regulation of, 9,22-3,30,62, Jacobson, Norman, Brooks-Scanlon, 107 82-3 public relations, 17,33-4,96,102 James, David, Simpson Reed and Company, 85,102 recreation areas, 84 relations with U. S. Forest Service, 6,76 Japanese squares, 93-4 relationships among loggers, 1,12,62 safety, 12-3,61-2,103-4 Kennedy, Robert, logger, 106 trade associations, 1-2,11-2,18-9,22-7,37-8 61-2,102 trade publications, 1-2,12 Kentucky, 23 unions, 9,13-4,86-7 Ketchikan Mill, 58 see also equipment Kirkpatrick, Dahl J., U. S. Forest Service, 97 logging methods bigwheels, 7-8,79 Klobucher, Frank, U. S. Forest Service, 70 railroad, 2,74,78 truck/tractor, 7-8,10,74,78-9,105 Kneipp, Leon F., U. S. Forest Service, 81-2 Long, George S., Weyerhaeuser Company, 20 Kreienbaum, C. H., Simpson Timber Company, 86-7,93-4,102-3 Louisiana, 71 Krenckman, Robert, 94 Louis W. and Maud Hill Family Foundation, 100 labor Loyal Legion of Loggers and Lumbermen (4L), Depression years, 88-9 9,11,14,61,87 Brice P. Disque, 61 home guards, 45 immigrant, 10 W. C. Ruegnitz, 61 safety, 13 strikes, 86 Lumber Code, 23-8,90 unions, 9,13-4,61,86-7 see also Article X; National Industrial workmen's compensation, 13,61 Recovery Act Lamb, Frank, Pacific Logging Congress, 20 Lumbermen's Industrial Relations Committee, Inc., 87 Langley, Arthur, 109 Lyman Timber Company, 2 legislation, 6n, 20, 22, 24-5, 30, 49, 95-6, 98 see also under names of individual Malheur National Forest, 65,74 legislation Marshall, Robert, wilderness advocate, 23,62 logging engineering Arctic Villages, 62n in colleges, 4,37 interest in, 3 Marx, Karl, 14

Mason, David T., 74,76,96 national forests (continued) see also fire protection; forest protection; commission on forestry, 94 sustained yield spokesman, 95, 99 multiple use; under names of individual national forests Matz, Fred, U. S. Forest Service, 66 National Industrial Recovery Act (1933), 22,92-3 Maunder, Elwood R., 7n,18n,22n Article X of Lumber Code, 22-7,31,90,108 invalidated, 28 Schecter Poultry Case, 23,26,90 Mazamas mountaineer club, 45 Meister, Jack, Shevlin Hixon operations, National Labor Relations Act (1935), 87 7-8,78 National Lumber Manufacturers Association, Meyer, Walter, 77 19.29 and National Industrial Recovery Act Michigan State College, 3 (1933), 22Miller, Orville, Deep River Timber Company, 21 national parks, 35,83 and Article X of Lumber Codes, 24 National Park Service, 83 Mills, Russell., University of Washington, 26 and forest protection, 26-7,101 New Deal era, 22-3,83 New Hampshire, 2-5,39-40,48-9,58 mining, 51,57,87 Concord, 40-1 Minnesota, 43,51,63 Jeffrey State Forest, 40 Mount Monadnock Forest, 40 Moltke, A. W., pioneer in truck logging, 79 New Hampshire State College, 3 Moore, Luther, 71-2 New Jersey, 90 Moore, Toby, Southern Pine Association, 20 North Cascades, 50-1 Morgan, Jack, inventor of yarding equipment, 105-6 North Dakota, 59 Morse, Roy, Long-Bell Lumber Company, 21 Northern Pacific Railroad, 64,93 multiple use, 34-5,51 Ochoco National Forest, 65,74 see also forest management O'Hearne, James, English Lumber Company, 17 Murray, L. T., Sr., West Fork Timber Company, 21,105 Ohio, 39 national forests Okanogan National Forest, 5,49,51 recreation on, 34-5,83-4

Olin, R. W., Potlatch Forest, Inc., 18

Olympic National Forest, 94-5

timber, 83,97

timber sales, 7,65-9,71-2,75

Olympic National Monument, 184

Olympic National Park, 35,83-4

Olzendam, Rod, Simpson Logging Company, 102

Oregon, 1-2,12,17,23,26,28,30,37,59,73,77-8, 87,94,98,107-8 Bend, 7,64,78,107 Cathlamet, 1-2 Klamath Lake, 5 Knappa, 21 Portland, 1,5-6,11,19,21,25,38,41,44-5,49, 53,59,62,65-8,70-1,74,77,81,90-2, 96,104,107

Oregon American Lumber Company, 87

Oregon Lumber Company, 59

Oregon State College logging engineering courses, 1 School of Forestry, 4,15,20,48

Oregon Voter, The, 25,108

Orell, Bernard, Weyerhaeuser Company, 109

Orr, George, U. S. Forest Service, 43-4

Orr, Jack, U. S. Forest Service, 43-4

Osborne, W. B., U. S. Forest Service Relative Humidity and Forest Fires, 15,63

Pacific Logging Congress, 6,62,78-9,81,100 attitudes toward IWW, 13-4 change from volunteer to paid staff, 19 communications committee, 17-8 founders, 1-2 funding, 19 George Cornwall, 1-2,37-8 interest in logging camps, 10-1 leadership, 6-7,18-20,107-8 meetings, 11,15-6,19,108 membership, 8,16-7,20-1 records of, 61-2 regional conferences, 17,18 relationship with other trade associations, 19

Pacific Logging Congress (continued)
resolutions committee, 8-9,17
spark arrester committee, 7,14
support forestry schools, 15
support standardization of truck design, 80

Pacific Northwest, 1,22,41,46,86,88,97,108

Pacific Northwest Loggers Association and Article X of Lumber Code, 22,26

Pacific Northwest Region (Region 6), U. S. Forest Service, 41-6,49-51 Clyde Seitz, 41-2 Portland office, 1,5-6,49,62

Pearce, Kenneth, University of Washington, School of Forestry, 26

Peavy, George, Dean, School of Forestry, Oregon State College, 4,20,48

Pennsylvania, 4-5,55

Pennsylvania State University, 3,39,41,46,48,96 faculty, 4,47-8 School of Forestry, 4

Pinchot, Gifford, 9,81

pine areas in Oregon, 59,64-5,73-4 used in World War I, 59 market for, 74

Polson Logging Company, 83

Pope and Talbot, 43

Potter, Harry, journalist, 2,38

public domain, 83

Puget Sound Associated Mills, 102

Puget Sound Loggers Association, 61

railroad logging, 2,74,78

railroads sawmills, 75-6 fires along, 63 in Alaska, 55 Scandinavia to timber areas, 64-5,67-8,70,72-5 forestry in, 12-3 Rainier National Park, 35 Schecter Poultry Case, 23,26,90 see also National Industrial Recovery Act Recknagel, A. B. and Article X of Lumber Code, 23 Schenck, Carl A., forestry educator, 32 recreation on national forests, 34-5,84 Scotch Lumber Company, 70 redwoods seeding, 33-4 influence of Emanuel Fritz, 76-7 Seitz, Clyde, U. S. Forest Service, 41-2 Reed, Mark, president, Simpson Logging Company, 6,10,20,88,90-2 Shelton Sustained Yield Unit, 96-9 and workmen's compensation Laws, 13 Sheppard, C. C., National Lumber Reid, C. C., U. S. Forest Service, 65 Manufacturers Association, 29 Richard, Emma, Drake's secretary, 100-01 Shevlin Hixon, 64,78 Richen, Clarence, Crown Zellerbach, 106 shingle industry, 93-4 Roosevelt, President Franklin D. Shumate, Cy, Simpson Logging Company, 80 and national forests, 82-4 and National Industrial Recovery Act, 22-3 Sierra Club, 45 Roosevelt, President Theodore, 39 Silcox, Ferdinand A., chief, U. S. Forest Service, 23,82 Roth, Al, 87 silviculture, 27 Ruegnitz, W. C., Bridal Veil Lumber Company speaks on camp life conditions, 11,61 Silvies River timber, 64-5 Russia Simpson Logging Company (now Simpson Timber Company), 80-1,85 forestry in, 12-3 C. H. Kreienbaum, 86-7,93,102 Ryan, Jack, U. S. Forest Service, 46-7 David T. Mason, 102 Depression years, 88 employs Drake, 6,91-2 Ryan, Walter, Weyerhaeuser Company, 108 first truck logging operation, 79-80 safety forest management, 96-7 Grays Harbor logging, 95 highway, 18,62 logging, 12-3,61-2,103-04 labor, 89 Mark Reed, president, 6,10,20,88, sales, timber, 55,59,64-5,70 90 - 2prices, 30,67-9,71-2,73,97 purchase of McCleary timber land,

90,94-5

Simpson Logging Company (continued)
purchase of national forest timber, 91
recreation areas, 84
safety program, 103-04
Shelton Sustained Yield Unit, 90,94-9
shingle mill, 93
sustained yield, 94-6
timber purchase, 97
timber survey, 91
unions, 86-7

Simpson Timber Company, 108

Sinnott, Congressman Nicholas, 65,72

skidding, 73,91 see also yarding

Society of American Foresters, 19

Southern Pacific Railroad, 64 Natron Cutoff, 43

Southern Pine Association, 27

southern United States, 18,23,70,77

spruce, 57

Stamm, Edward P., Crown Zellerbach Corporation, 21,104-07

Stark, Fletcher, 71

state forestry, 30,33

Stevens, Carl, U. S. Forest Service, 96

Stewart, Dave, president, Pacific Logging Congress, 21

stumpage, logging, 30,32,55,97-8

Sultan Railway and Timber Company, 11

sustained yield, 94-9

Sustained-Yield Forest Management Act (1944), 95,98

Switzerland, 12 multiple use in, 34-5

Taylor, Smith, U. S. Forest Service, 42,45

Tennant, John, Long-Bell Lumber Company, 87

Tenth Engineers, U. S. Army, 6,90

Texas, 71

Tilton, Warren, 26

Timberman, The, 2,12 editor, George Cornwall, 5 influence on logging, 1,37

timber tax, 28-30,64

Tongass National Forest, 5

tractor logging, 7,78 arch device, 7,80 Caterpillar, 105 damage caused by, 7-8 safety in, 103 see also equipment

trade associations, 1,61-2,102,108-09 and Article X of Lumber Code, 22-7 publications of, 1-2,12,37-8 relationships among, 18-9 see also under names of individual trade associations

trade publications, 1-2,12,37-8,61,102

truck logging, 74,78-80 see also equipment

Union Pacific Railroad, 64,68

unions, 9-10,13-4,61,86-7 see also under names of individual unions

United Mineworkers, 87

United States, 12,22,34-5,52,58

United States Congress, 23,30.98

University of Minnesota, 43

University of Texas, 71

University of Washington, 77 logging engineering, 1,25,37 School of Forestry, 15,20,25,37

Vinnedge, R. W., North Bend Lumber Company, 21

Wagner-Connery Act see National Labor Relations Act

Wallenburg, Ernest, U. S. Forest Service, 66,74

War, U. S. Department of, 9-10

Washington (state of), 1,20-1,23-4,30,37,63, 84-5,90,92,108
fire protection, 64,109
Forest Practice Act, 26
forest protection, 27-8
Puget Sound, 51,93,99,108
Seattle, 2,6,16,22,25,35,55-6,63
workmen's compensation laws, 13

Washington, D. C., 22-4,26,29,67,81,83,90, 93,97

Washington Forest Fire Association (now Washington Forest Protection Association), 7n,27,64,109 see also Cowan, Charles

water resource survey, Alaska, 53,55-6

Webster, L. T., Washington Forest Fire Association, 109

Weigle, William, U. S. Forest Service, 5,51-2,55-6

West Coast, 12,23-4,26,40,41,46-7,68,73,90

West Coast Lumberman, 2,12,38

West Coast Lumbermen's Association and Article X of Lumber Code, 22,26,90

Western Forestry and Conservation Association, 18-20

Western Pine Association, 27

western United States, 3-5,17-8,30,37,76,83

Weyerhaeuser Company, 20,25,98,102,108

W. H. Eccles Lumber Company, 59

Whisnant, Archibald, secretary, Pacific Logging Congress, 18-20,107-8

Whitman National Forest, 6 timber sales, 59,67

Wicks, Powers, representative of Caterpillar tractors, 105

Willamette National Forest (previously Cascade National Forest), 43

Wind River Experiment Station, 63

Winkenwerder, Hugo, Dean, College of Forestry, University of Washington, 20,26

Winslow, Carlile P. "Cap", Forest Products Laboratory at Madison, Wisconsin, 82

Wisconsin, 82,91

Wittamore, Lawrence, New Hampshire forestry, 40-1

Woolley, Carwin, Pacific Logging Congress, 108

workmen's compensation, 13,61

Works Progress Administration, 83

World War I, 6,10,36,54-5,57,79,83,86,96 cruising airplane spruce, 59 demand for canned salmon, 6,55 influence on Forest Service, 60-1

World War I (continued)
pine airplane cants, 60-1
spruce airplane cants, 10,60-1
Spruce Production Division, 10,61
Tenth Engineers, 90
use of tractors, 7,79

World War II, 10,36,75,108

Wright, Dee, packer, U. S. Forest Service, 45-6

Yale University, 48,55,63,77,90

yarding, 7-8,91,106 damage caused by, 7-8 see also hauler, log; railroad logging; skidding; tractor logging; truck logging

Yingst, John, 77

Zon, Raphael, U. S. Forest Service, 62