WASHINGTON STATE COLLEGE IN RELATION TO HORTICULTURE

IN THE PACIFIC NORTHWEST*

Often I have said that a text is something to talk from and if necessary far from. Speakers at your conventions no doubt are accustomed to taking liberties with assigned topics, and I shall not claim any exception, to that rule. When Dr. Snyder, your Executive Officer, some weeks ago phoned to me to ask whether I would accept an invitation to speak at this meeting, and I evidently was in an unusually accommodating mood. Perhaps it was on one of those rare occasions when Washington State College had won a football game; or perhaps the contractors had finally finished a new dormitory; or perhaps someone had given W.S.C. a generous scholarship grant. In the short time that I have been in the Northwest, I have found that administering Washington State College,—at least as I want to see it run,—doesn't leave one much chance to worry about what to do with the rest of his time.

Anyhow, I cheerfully assented to your assignment, although I do not recall any mention of a subject. When later on I saw the assignment, "Relation of Washington State College to Washington Horticulture," I thought to myself, "What a droll subject! The fellow who thought up that one must not have had much imagination. Can it be that there is still among the horticulturists any uncertainty about the relation of the State College to their industry?"

Why not something exciting like the Future of Atomic Power?; or the Craftsmanship of General MacArthur in Japan?; or Harnessing the Columbia?; or How to get on or off the Russian Blacklist?; or even the new "Battle of the Bulge" in American colleges and universities? What, on the other hand, is exciting about the relation of an industry to a state university, with its mani-

fold activities in teaching, research, engineering, and extension? I have often been told, as you have been told, that the trouble with most conventions is that too many people make dull speeches; to which one of my friends has commented that the explanation rather is that too many dull people make speeches.

But after all, what is more exciting than the possibilities of public and private cooperation between a great industry like horticulture and a great public service institution like W.S.C.? And what, after all, is more important if you believe as I do believe that in agriculture in its wide ramifications may be found the key to a reasonable solution of many of the problems involving our national welfare, even world-salvation, which today are so puzzling, so perplexing, and so nearly frustrating.

The only permanent feature of our life nowadays is change. This seems to be true in our industry and commerce as in our social, political, and diplomatic relations; and it seems to be true alike in our local, national, and international affairs. This fact of itself is a never-ending challenge to industry and commerce, to intelligent citizens everywhere, and to educational institutions like Washington State College if they do their job of education and leadership.

We have in Washington not the most but some of the best irrigated agriculture in the United States. We have a phenomenal diversity of climates, rainfall, topography, soils, transportation, and markets, a diversity greater perhaps than in any other state; and in the years ahead the promising prospect of great development in the Columbia Basin which may add greatly to the stature and strength of Washington agriculture, or conceivably may weaken it, depending on the wisdom of the policies by which this great development is guided.

I have seen agriculture in every state of the union, except one, and in many foreign countries. The State of Washington has much of the best and some of the worst agriculture I have ever seen. There are great oppor-
tunities here for improvement in agricultural production. There are even greater opportunities, I think, for advances in agricultural marketing and distribution, and in the processing, refinement, and utilization of agricultural products, including refrigeration, dehydration, irradiation, and the myriad forms of chemical and by-products utilization to which modern science gradually has been opening the way.

The history of agriculture in the Northwest has been marked by great advances in primary production, and in more recent years in many ways, in marketing and distribution. Its future, I think, will be distinguished more by more diversified processing and industrial utilization of agricultural products. The growing diversification of agriculture, forestry, and manufactures in the Northwest promises additional opportunities in agricultural industry and more readily accessible nearby markets.

Certainly there is no more promising or practical way toward orderly, dependable, year-round employment, the absence of which in past years has been a handicap on agricultural enterprise and in the future may become even a curse. We are living in an era of concerted striving toward greater "social security." That striving will continue to take dubious political forms unless the way is found in simpler and sounder economic forms.

There will be no such security without more dependable continuity of employment. Primary agricultural production of its very nature is seasonal and unbalanced, as through technological improvements we constantly are getting farther away from the general family farm as a prevailing type, and farther toward specialized production, constantly more mechanized. Our agriculture is multiplying its own employment problems at the same time that it is multiplying its own productivity.

These also are public problems. Their proper solution is of great public interest. It is just as well then that we do try together to define the relation of a public service institution, such as the State College of
Washington, to horticulture which is an outstanding exponent of advancing agriculture in this State.

The four functions themselves of the State College are sufficiently clear-cut:

First, teaching. If you want better orchardists, salesmen, technologists, then there must be an institution to which ambitious young people may go for their training. Agronomy, animal husbandry, dairying, poultry, entomology, plant pathology, nutrition, horticulture, floriculture, game management, agricultural engineering, marketing, agricultural economics,—is there any part of these which does not directly or indirectly affect your industry? Washington State College in facilities in the agricultural sciences is aiming at the best in the West, and it is on the way. It aims to couple good training with intelligent understanding of public issues, and a spirit of decent and responsible citizenship. It does not give young people an education. It merely gives them a chance to get it for themselves. And you,—many of you in this convention,—are generously helping them with your scholarship funds.

Second, research. Hunting for new ideas, new clues, blazing new trails. All persons, it is said, are ignorant,—only on different subjects, and as Charles F. Kettering, the research head of General Motors and one of the most stimulating personalities in American life, says:

"A man must have a certain amount of intelligent ignorance to get anywhere nowadays."

Third, engineering. Finding new adaptations and new applications of ideas, new and old. It is sometimes difficult to locate the distinction between engineering and research. But the distinction is important, and Washington State College is observing it.
Fourth, extension. Putting the results of research and engineering to work in individual enterprises on the farms, in the orchards, the warehouses, factories, and markets. Although less spectacular than resident enrollment in a college, and although lacking the procession of academic degrees, extension service is one of the most useful forms of public education. It is perhaps our most distinctive American contribution to the means of agricultural education throughout the world; and the extension service identified with Washington State College is generally recognized as outstanding among those of the several states.

Washington State College has today about 350 persons engaged in teaching, about 7,000 enrolled students, over 100 engaged in agricultural research and agricultural engineering, and more than 150 engaged in agricultural extension service throughout the State. During the past year, the extension service has helpfully assisted 47,625 individual farm enterprises and 41,943 urban families or enterprises, mostly in non-metropolitan communities. These in the aggregate of resident classroom and laboratory instruction and field extension services constitute one of the largest public educational enterprises in the West.

What is the significance of the new Institute of Agricultural Sciences established within the past year at Washington State College? Prior to a year ago, we had separately, 1st, a College of Agriculture, with a good faculty and a dean directing the resident teaching in agriculture; 2nd, a system of eight agricultural experiment stations and laboratories, with a large state-wide staff and a director; 3rd, a state-wide extension service with its director; 4th, a College of Veterinary Medicine with its dean, but with little or no visible connection with the rest of the agricultural sciences; 5th, a College of Home Economics, much of its work pertaining to nutrition, agriculture,
and rural life; and 6th, a Division of Industrial Research and Extension which had little more than a friendly speaking acquaintance with the College of Agriculture, the Experiment Stations, and the Agricultural Extension Services. Together these constituted the largest group of closely related student, faculty, and public interests at Washington State College. But they were not coordinated except sketchily through the President's Office. All these are now marshalled through the Institute of Agricultural Sciences and with close working relations with the Washington State Institute of Technology.

This, you may say, is merely improved organization on the inside. It is, nevertheless, important, and important to you and to the State because it makes individual effort "count for more." It may not be the "orthodox" way among Land-Grant universities. But it is working.

A second working relationship established during the past year has been with the agricultural industries themselves through the Washington State College Advisory Boards on Horticulture, Animal Husbandry, Dairying, Poultry, General Farming, and Technology. The occasional formal meetings of these Boards and the more frequent informal consultations with their members have already had an effect of identifying the whole program in agricultural sciences at Washington State College more closely with the aims, needs, hopes, and ambitions of the agricultural industries of the State.

A third cooperative relationship has been more clearly defined between Washington State College as a research and engineering agency and the State Department of Agriculture as a regulatory and marketing guidance agency; and between the State agencies on the one hand and the Federal agencies on the other.

We still have a long way to go toward a still further cooperative relationship which would, I am sure, be beneficial to Northwest agriculture and beneficial to the Northwest states. There is now no adequate mechanism for the clearing and exchange of ideas and research developments between the
several Northwest States, although they have generally similar natural resources and generally comparable agricultural problems. Worse than that, there is at present no general purpose on the part of agencies of these states to effectuate any such exchange of ideas. There is in the Pacific Northwest an exaggerated consciousness of state lines of demarcation in terms of research, not only in the agricultural sciences, but also in the industrial technologies. This is an unnecessary weakness to which, to some extent, each of the Northwest States is contributing—the State of Washington perhaps less than most of the others. The result is needless duplication, especially in research and engineering investigations.

I suppose that it is politically difficult for any State to admit that the service of a neighbor state in a particular scientific field is superior to its own. But I do think we would all be better off if we were less meticulous in the observance of state lines of demarcation in matters at least of scientific research and engineering development. A more general and more wholesome collaboration between the states would make the individual effort of each State "count for more."

Perhaps then you may say that the President of Washington State College should help to bring this about. I should be glad with your help to accept such a challenge. It applies, I think, in horticulture as much as in any branch of the agricultural sciences. First steps have already been taken. I don't expect to find myself a "voice crying in the wilderness," and I mention this now to you who are among the leaders of Washington agriculture, because later when Washington State College proposes to make some unorthodox arrangements for exchanges with other institutions in other states, I don't want to hear any of you complain that "This or that idea or technique or application was invented in Washington; and that Oregon and Idaho, California and Montana should not have it."
Washington State College, with the help of its Advisory Boards, has submitted to the Governor and to the State Legislature a budget for the next two years which proposes some ambitious provisions for Washington horticulture. The new facilities requested, if made available, will greatly improve its services to horticulture in teaching, research, engineering and extension. We have stated to the Legislature in simple terms what we honestly believe will be required in additional funds to enable W.S.C., its Experiment Stations and its Extension Services to do for the agriculture and industry of this State what agriculture and industry have asked it to do.

Washington State College has, on the whole, a good staff in agricultural sciences. Some spots should be improved. Gradually they are being improved. We are frankly trying to develop a staff of competent men who will not by preference occupy a rocking chair constantly in motion but going nowhere; rather by preference getting on a motor cycle with a good carburetor and enough gas to give them a chance to go somewhere with new ideas, new methods, and new techniques. These objectives are even more important to you, certainly more important to you than to me. A College after all is a means to an end and not an end in itself, a wholesome fact wholesomely stated in the report of the Washington State Senate Interim Committee on Agriculture, just off the press, which all persons interested in Washington agriculture should read.

But there is yet another type of cooperation and understanding in which also you are concerned. It is perhaps not a formal obligation of the State College. Yet in ultimate importance it may transcend all the others. Here we are, all of us, in the shadow of a great war in which a large part of the wealth of the civilized world has been dissipated or destroyed, and in which we, as a Nation, have mortgaged a large percentage of our own national wealth and have undertaken many new obligations in the "One World" in which we live. I am not discussing the merits of these facts or these actions. I
am merely stating that they have occurred and that they are the facts with which the people of this Nation and of this State from here on will have to live and will have to deal. Of course we can continue for a time to "temporize" with them. Largely we have been doing that,—justifiably, I think, until we could catch our breath in reconversion from a war economy. But eventually we must pay or repudiate; and deliberate inflation is partial repudiation. Let us make no mistake about that.

Yet there are those among us who think, or seem to think, that a six-year period of world-wide destruction of human life and of material wealth on a gigantic scale may somehow, by some form of bookkeeping, be accounted as an asset or as an increase in wealth and well-being. There are some who think, or seem to think, that if only they could secure some kind of a law which says that we are economically better off because of war destruction, war debts, and war losses, we would in fact be better off; that if only we could get some kind of a favorable union agreement, we could then get more for less; in short, that by some form of political, statistical, bargaining or legislative sleight-of-hand, we can find some way of solving these problems of war and war's aftermath without more work, harder work, and more production.

I was trained years ago as an economist, and I worked hard at it. I once taught economics. But that was at a time when economics was a branch of scientific knowledge and not the branch of quibbling propaganda into which nowadays it often is being converted. Wealth, we used to say, comes from production. That is what I taught my students. That is what I thought then and that is what I think now. I do not believe that there is any substitute for work as a means of adding to wealth, income, and standards of living at home, not to speak of paying off our war debt,—and at the same time helping other nations to get on their own feet, which seems also to be a part of the price which we will pay if we and our children are to have even a chance to live in a world at peace.
I know, of course, that there are many who want jobs and not so many who want work; that there are millions of us who would like to put off until some remote "tomorrow" the day of reckoning; and that there are some, too, who would climb on the backs of others if by so doing they themselves can avoid carrying their own fair share of the national load resulting from the war. This is not confined to any particular strata or levels of our society. If you think otherwise, just look at the principal headlines in today's newspapers.

During these war years in the United States, as a whole, agriculture increased its total production more than 50% above the average pre-war levels. Our own State of Washington this year has had a large agricultural production, possibly its largest, with 12% fewer persons employed than 5 years ago. The war record of increased agricultural production was achieved not by vigorous young men, because most of them were in the Army and the Navy, but by the older men, the women, and the children.

And yet, the combined production and employment statistics of our great mass-production manufacturing industries even a year after the end of the shooting war show a per man-per hour production one-sixth less than it was before the war; and this, notwithstanding technological advances, which at least to some extent should have facilitated a higher per man-per hour productivity not a lower. Again, if you don't know what I mean, just look back at the news headlines during the last nine months.

What is it that nowadays is holding our civilization together? Agriculture is not the source of accumulating uneasiness and anxiety in our own country. Rather, agriculture is the source of the principal assurance that after all, in this period of many problems and fewer answers, we will finally work our way through. This is just as true in occupied Europe with a recovery in agriculture of about 80% of pre-war, in heavy industry only 15%,
and in light industry barely 50%. It is true in Japan, with national agricultural production the highest in its history, necessary now, to be sure, in a nation which for years had tried to live off the looting of other nations, but now has to learn to live on its own resources, but with industrial production at less than half of its pre-war rate.

It is hard for all of us, or any of us, nowadays to keep a balanced perspective. Yet I should like in conclusion to mention a few of the formulas which here and there are being advanced for our agricultural salvation. Some of these are superficially attractive. But many of them are deceptive, and some of them would trade out the long-run interests and safety of our children and their children for our own temporary convenience and accommodation.

I am not implying that there are not fundamental problems in American agriculture and dangerous hazards. There are. I think we will always have problems and hazards in our agriculture; at least I hope we will.

Some, for example, have suggested general acreage limitations, imposed and administered under Federal law, to avoid the production of surpluses; others have advocated that we do not anticipate surpluses in advance, but when they occur, that we "plow them under." Still others advocate a system of universal and permanent subsidies to assure so-called agricultural "parity." Again others with, I think, greater wisdom are advocating a moderate system founded in Federal legislation and administration of price "floors" and price "ceilings," coupled with provisions for Government warehousing and marketing of surpluses; a price "floor" high enough that it will not "bust" good, hard-working farmers who do their job, but low enough that it will not encourage slovenly agriculture; and a price "ceiling" low enough that it will not impose on the public unreasonable increases in the costs of living and high enough that it will not thwart or discourage ingenious agricultural enterprise.
I am not intending to analyze or debate the merits of the voluminous plans for the salvation of agriculture already under discussion. This country is committed to a two-year post-war agricultural price policy which will assure agricultural producers 90% of "parity." Within that period and during the next few years, there will be more general public interest in national agricultural policy than at any time in the last ten years. There will be conflict, contradiction, and endless debate. All I mean to say is: Let us be endlessly watchful and endlessly skeptical of national policies for agriculture which are founded on the assumption of limitations of production as a national policy. We are a part of "One World," which is impoverished and in which the greatest need for years to come,—perhaps permanently,—will be greater production of goods. To that I would quietly add: Let us be skeptical too of any plan for national salvation either in agriculture or in industry or in commerce which is based on the assumption of more pay for less work.

The economic picture of the world is not a pretty picture, any way we look at it. Our own picture, difficult as it is, is a prettier picture only because so far we have been more favored by events and because so far we have relied on initiative, resourcefulness, and a will to work as the principal sources of our national well-being.

In the fall of 1938 at the time of the Munich incident, Mrs. Compton and I were in Central Europe on a public mission. In the course of our journeys we visited with an old friend, a distinguished 70 year-old German Forester who had spent many years in the United States as head of one of our great forestry schools,—an ardent but of course an impotent anti-Nazi,—who said to himself and to us that he was too old to hope to return to the United States and then added: "America is a place where you can keep your feet on the ground and your eyes on the stars."

What a commentary on events is that interpretation by an old German forester of the spirit of America and American opportunity: "A place where
you can keep your feet on the ground and your eyes on the stars." You and I, and others like us, are today the trustees of that spirit. I want to see, and I am sure you want to see, Washington State College share faithfully in that trusteeship. In the name of our children, may we hold it secure and intact.

I have said that it is agriculture more than anything else which today is keeping our civilization together; and may we who have important interests and responsibilities in agriculture be mindful of the words spoken exactly one hundred years ago in the United States Senate by Daniel Webster, a prophet in his own time, when he said in another period of national emergency:

"In danger is that Nation whose people have lost their love for the soil."